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Characteristics of Doctoral Scientists and Engineers in the United States: 1995

Detailed Statistical Tables

Division of Science Resources Studies
Directorate for Social, Behavioral and Economic Sciences

National Science Foundation

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R. Keith Wilkinson, Project Officer

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CONTENTS

Section *Page*

I. GENERAL NOTES 1
II. DETAILED STATISTICAL TABLES 3

APPENDIXES

A. Technical Notes 101
B. Survey Questionnaire 119

GETTING INFORMATION ON THE WORLD WIDE WEB
ORDER FORM

SECTION I. GENERAL NOTES

This report, presents data on the demographic and employment characteristics of the Nation's doctoral scientists and engineers. The data were developed as part of the Longitudinal Doctorate Project.[1] Current information on the supply and utilization of doctoral personnel in science and engineering reflects the results of the 1995 Survey of Doctorate Recipients (SDR), the twelfth in a biennial series. The population of the 1995 survey includes persons under the age of 76 who hold doctorates in science or engineering from U.S. institutions.

This report provides information on the number of scientists and engineers by demographic characteristics such as citizenship, place of birth, field of degree, and employment-related characteristics such as occupation, sector of employment, median salary, and various labor force rates. Of further note, some tables in this report include estimates for doctoral scientists and engineers employed in 4-year colleges and universities.

In addition to this section on General Notes, this report includes Detailed Statistical Tables, Technical Notes, and the Survey Instrument. The Detailed Statistical Tables section includes employment and salary detail tables. The Technical Notes section contains information on survey methodology, coverage, concepts, definitions, and sampling errors.

Requests for additional information should be directed to R. Keith Wilkinson, Science and Engineering Personnel Program, Division of Science Resources Studies, National Science Foundation, Arlington, VA. 22230. Telephone: (703) 306-1776.

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[1] The Longitudinal Doctorate Project consists of the Survey of Doctorate Recipients, a biennial survey conducted since 1973, and the Doctorate Work History File, a longitudinal file of data from these surveys.

LIST OF TABLES

Table *Page*

1. Doctoral scientists and engineers, by field of doctorate and employment status: 1995 7
2. Doctoral scientists and engineers, by occupation and employment status: 1995 8
3. Doctoral scientists and engineers, by broad field of doctorate, employment status, and sex: 1995 9
4. Doctoral scientists and engineers, by broad occupation, employment status, and sex: 1995 11
5. Doctoral scientists and engineers, by broad field of doctorate, employment status, and race/ethnicity: 1995 13
6. Doctoral scientists and engineers, by broad occupation, employment status, and race/ethnicity: 1995 15
7. Selected employment characteristics of doctoral scientists and engineers, by field of doctorate: 1995 17
8. Selected employment characteristics of doctoral scientists and engineers, by occupation: 1995 18
9. Doctoral scientists and engineers, by field of doctorate and sex: 1995 19
10. Doctoral scientists and engineers, by occupation and sex: 1995 20
11. Doctoral scientists and engineers, by field of doctorate and race/ethnicity: 1995 21
12. Doctoral scientists and engineers, by occupation and race/ethnicity: 1995 22
13. Doctoral scientists and engineers, by field of doctorate and citizenship status: 1995 24
14. Doctoral scientists and engineers, by occupation and citizenship status: 1995 25
15. Doctoral scientists and engineers, by field of doctorate and age: 1995 27
16. Doctoral scientists and engineers, by occupation and age: 1995 28
17. Doctoral scientists and engineers employed in universities and 4-year colleges, by broad field of doctorate, sex, and academic rank: 1995 30
18. Doctoral scientists and engineers employed in universities and 4-year colleges, by broad field of doctorate, sex, and tenure status: 1995 31
19. Doctoral scientists and engineers employed in universities and 4-year colleges, by broad field of doctorate, primary work activity, and secondary work activity: 1995 32

Table *Page*

EMPLOYED DOCTORAL SCIENTISTS AND ENGINEERS

20. by field of doctorate and sector of employment: 1995 34

21. by occupation and sector of employment: 1995 35

22. by field of doctorate and primary work activity: 1995 37

23. by occupation and primary work activity: 1995 38

24. by geographic location and broad field of doctorate: 1995 40

25. by geographic location and broad occupation: 1995 42

26. by field of doctorate, race/ethnicity, and sex: 1995 44

27. by occupation, race/ethnicity, and sex: 1995 46

28. by demographic characteristics and broad field of doctorate: 1995 48

29. by demographic characteristics and broad occupation: 1995 49

30. by demographic characteristics and citizenship status: 1995 50

31. by demographic characteristics and sector of employment: 1995 51

32. by demographic characteristics and primary work activity: 1995 53

33. by demographic characteristics, race/ethnicity, and sex: 1995 55

34. by employment-related characteristics, race/ethnicity, and sex: 1995 57

35. by employment-related characteristics and sector of employment: 1995 59

36. by employment-related characteristics and primary work activity: 1995 61

37. by field of doctorate and broad occupation: 1995 63

MEDIAN ANNUAL SALARIES OF DOCTORAL SCIENTISTS AND ENGINEERS

38. by field of doctorate, race/ethnicity, and sex: 1995 64

39. by occupation, race/ethnicity, and sex: 1995 66

40. by field of doctorate and sector of employment: 1995 68

41. by occupation and sector of employment: 1995 69

42. by field of doctorate and primary work activity: 1995 70

43. by occupation and primary work activity: 1995 71

44. by sector of employment, broad field of doctorate, and sex: 1995 72

Table *Page*

45. by sector of employment, broad occupation, and sex: 1995 74

46. by sector of employment, broad field of doctorate, and race/ethnicity: 1995 76

47. by sector of employment, broad occupation, and race/ethnicity: 1995 78

48. by demographic characteristics, race/ethnicity, and sex: 1995 80

49. by demographic characteristics and citizenship status: 1995 82

50. by demographic characteristics and sector of employment: 1995 84

51. by demographic characteristics and primary work activity: 1995 86

52. by demographic characteristics and broad field of doctorate: 1995 88

53. by demographic characteristics and broad occupation: 1995 90

54. by employment-related characteristics, race/ethnicity, and sex: 1995 92

55. by employment-related characteristics and citizenship status: 1995 94

56. by employment-related characteristics and sector of employment: 1995 95

57. by field of doctorate and year of doctorate: 1995 96

58. by geographic location and broad field of doctorate: 1995 97

59. by geographic location and broad occupation: 1995 99

Table 1. Doctoral scientists and engineers, by field of doctorate and employment status: 1995

Page 1 of 1

Field of doctorate	Total	Employed				Unemployed/ seeking	Retired	Not empl'd/ not seeking
		Total	Full-time	Part-time	Posdoc appt			
Total	542,540	484,780	434,250	27,710	22,810	7,340	40,570	9,860
Sciences	455,530	406,130	359,890	25,210	21,040	5,920	34,450	9,040
Computer and mathematical sciences	31,740	29,250	27,360	1,190	700	460	1,620	410
Computer and information sciences	6,580	6,440	6,190	90	160	60	S	80
Mathematical sciences	25,160	22,820	21,170	1,100	540	400	1,620	330
Life and related sciences	149,320	132,190	114,080	5,800	12,310	2,230	11,410	3,490
Agricultural and food sciences	17,850	15,440	13,850	740	860	260	1,900	250
Biological and health sciences	126,890	112,870	96,590	4,920	11,360	1,900	8,910	3,210
Environmental sciences	4,590	3,890	3,650	150	90	70	590	S
Physical and related sciences	116,550	101,300	90,930	4,480	5,890	2,000	11,340	1,920
Chemistry, except biochemistry	61,350	52,540	47,710	2,380	2,450	1,120	6,640	1,010
Geology and oceanography	15,180	13,090	11,860	600	630	280	1,520	290
Physics and astronomy	38,730	34,410	30,200	1,490	2,720	550	3,160	610
Other physical sciences (incl. earth)	1,300	1,260	1,160	S	90	S	S	S
Social and related sciences	157,920	143,390	127,520	13,730	2,140	1,230	10,080	3,220
Economics	22,500	19,860	18,570	1,240	S	260	2,040	350
Political and related sciences	16,330	14,790	13,920	680	180	160	1,280	100
Psychology	82,150	75,810	64,700	9,530	1,580	500	3,990	1,860
Sociology and anthropology	23,030	20,530	18,830	1,440	270	220	1,830	450
Other social sciences	13,910	12,410	11,500	840	60	110	940	450
Engineering	87,000	78,650	74,370	2,510	1,780	1,420	6,120	820
Aerospace/aeronautical	3,810	3,340	3,100	100	150	S	340	80
Chemical	12,590	10,930	10,220	460	250	300	1,220	130
Civil	7,740	7,400	7,070	200	140	90	240	S
Electrical/computer	22,850	20,780	19,950	530	300	350	1,460	260
Industrial	2,410	2,240	2,120	90	S	60	110	S
Mechanical	10,560	9,710	9,250	210	260	140	640	70
Other engineering	27,050	24,230	22,670	910	650	440	2,110	260

KEY: S = Suppressed because fewer than 50 weighted cases reported (See NOTE below)

NOTE: All numbers in the table are estimates derived from a sample.

SOURCE: National Science Foundation/SRS, 1995 Survey of Doctorate Recipients

Table 2. Doctoral scientists and engineers, by occupation and employment status: 1995

Page 1 of 1

Occupation*	Total	Employed				Unemployed/ seeking	Retired	Not empl'd/ not seeking
		Total	Full-time	Part-time	Posdoc appt			
Total	542,540	484,780	434,250	27,710	22,810	7,340	40,570	9,860
Scientists	318,830	284,840	247,330	17,440	20,080	3,770	24,350	5,880
Computer and mathematical scientists	40,820	37,440	35,230	1,400	820	460	2,190	730
Computer and information scientists	15,180	14,170	13,540	390	240	210	500	300
Mathematical scientists	7,060	6,050	5,450	260	340	70	660	290
Postsecondary teachers, computer and mathematical sciences	18,580	17,230	16,240	760	230	180	1,020	150
Life and related scientists	97,870	85,990	70,300	2,710	12,970	1,510	8,430	1,940
Agricultural scientists	9,660	7,730	6,660	410	730	200	1,640	80
Biological scientists	54,310	47,650	34,630	1,200	11,820	1,200	4,050	1,420
Forestry and conservation scientists	1,060	850	740	80	S	S	190	S
Postsecondary teachers, life and related sciences	32,840	29,760	28,330	1,030	390	110	2,560	420
Physical and related scientists	75,690	65,900	58,410	2,640	4,850	1,200	7,190	1,410
Chemists, except biochemists	24,490	21,270	18,880	880	1,510	440	2,360	430
Earth scientists	10,030	8,590	7,560	360	670	270	1,000	180
Physicists and astronomers	13,810	12,080	9,420	380	2,280	270	1,160	300
Other physical scientists	2,350	1,760	1,600	50	110	90	340	160
Postsecondary teachers, physical and related sciences	25,010	22,190	20,950	960	280	140	2,330	350
Social and related scientists	104,450	95,510	83,390	10,680	1,440	600	6,540	1,780
Economists	6,510	5,800	5,310	460	S	80	510	110
Political scientists	1,470	1,110	970	100	S	S	300	S
Psychologists	43,650	41,010	32,630	7,330	1,050	190	1,410	1,050
Sociologists and anthropologists	3,550	2,600	2,310	230	60	70	790	90
S&T historians and other social scientists	2,500	2,130	1,820	210	90	S	280	90
Postsecondary teachers, social and related sciences	46,770	42,870	40,360	2,350	160	220	3,250	430
Engineers	65,290	58,430	54,920	1,910	1,590	880	5,440	530
Aerospace and related engineers	4,200	3,630	3,480	60	90	70	450	60
Chemical engineers	6,520	5,640	5,280	160	200	180	640	60
Civil and architectural engineers	2,930	2,790	2,590	130	60	50	90	S
Electric and related engineers	11,840	10,660	9,960	360	330	180	960	S
Industrial engineers	860	840	770	50	S	S	S	S
Mechanical engineers	6,280	5,770	5,310	210	240	S	460	S
Other engineers	15,540	13,590	12,410	620	570	290	1,480	180
Postsecondary teachers, engineering	17,120	15,530	15,120	320	90	80	1,360	160
Non-S&E occupations	158,420	141,520	132,010	8,360	1,150	2,680	10,740	3,450
Managers, administrators, etc.	90,710	83,820	81,480	2,010	330	1,060	5,280	550
Health and related occupations	15,030	13,450	12,030	990	420	250	870	460
Teachers, except S&E postsecondary teachers	21,480	18,920	17,360	1,380	180	230	1,810	520
Social services and related occupations	2,090	1,770	1,550	200	S	S	190	110
Technologists, etc.	6,030	5,340	4,970	310	60	160	320	220
Sales and marketing occupations	5,570	4,870	4,210	630	S	210	370	120
Other non-S&E occupations	17,500	13,360	10,410	2,830	120	740	1,930	1,460

*If the respondent was unemployed, occupation of last job was reported.

KEY: S = Suppressed because fewer than 50 weighted cases reported (See NOTE below)

NOTE: All numbers in the table are estimates derived from a sample.

SOURCE: National Science Foundation/SRS, 1995 Survey of Doctorate Recipients

Table 3. Doctoral scientists and engineers, by broad field of doctorate, employment status, and sex: 1995

Page 1 of 2

Employment status/field of doctorate	Total	Male	Female
All Fields:			
Total	542,540	425,930	116,610
Employed full-time	456,470	363,840	92,630
Employed part-time	28,310	15,650	12,670
Unemployed, seeking	7,340	5,720	1,610
Retired	40,570	36,480	4,090
Not employed, not seeking	9,860	4,250	5,610
Sciences:			
Total	455,530	343,370	112,160
Employed full-time	380,400	291,500	88,900
Employed part-time	25,730	13,390	12,350
Unemployed, seeking	5,920	4,500	1,410
Retired	34,450	30,390	4,060
Not employed, not seeking	9,040	3,590	5,440
Computer and mathematical sciences:			
Total	31,740	27,730	4,010
Employed full-time	28,060	24,780	3,280
Employed part-time	1,190	770	420
Unemployed, seeking	460	410	S
Retired	1,620	1,510	120
Not employed, not seeking	410	260	150
Life and related sciences:			
Total	149,320	108,400	40,920
Employed full-time	126,160	92,440	33,730
Employed part-time	6,030	3,300	2,730
Unemployed, seeking	2,230	1,560	670
Retired	11,410	9,840	1,570
Not employed, not seeking	3,490	1,730	2,220
Physical and related sciences:			
Total	116,550	103,880	12,680
Employed full-time	96,690	86,410	10,280
Employed part-time	4,610	3,880	730
Unemployed, seeking	2,000	1,740	260
Retired	11,340	10,760	580
Not employed, not seeking	1,920	1,080	840
Social and related sciences:			
Total	157,920	103,370	54,560
Employed full-time	129,490	87,860	41,630
Employed part-time	13,900	5,430	8,470
Unemployed, seeking	1,230	800	440
Retired	10,080	8,290	1,790
Not employed, not seeking	3,130	980	2,230

See explanatory information and SOURCE at end of table.

Table 3. Doctoral scientists and engineers, by broad field of doctorate, employment status, and sex: 1995

Page 2 of 2

Employment status/field of doctorate	Total	Male	Female
Engineering:			
Total	87,000	82,560	4,450
Employed full-time	76,070	72,340	3,730
Employed part-time	2,580	2,260	320
Unemployed, seeking	1,420	1,220	200
Retired	6,120	6,080	S
Not employed, not seeking	820	650	170

KEY: S = Suppressed because fewer than 50 weighted cases reported (See NOTE below)

NOTE: All numbers in the table are estimates derived from a sample.
Postdoc employment is included as either employed full-time or employed part-time.

SOURCE: National Science Foundation/SRS, 1995 Survey of Doctorate Recipients

Table 4. Doctoral scientists and engineers, by broad occupation, employment status, and sex: 1995

Page 1 of 2

Employment status/occupation*	Total	Male	Female
All Occupations			
Total	542,540	425,930	116,610
Employed full-time	456,470	363,840	92,630
Employed part-time	28,310	15,650	12,670
Unemployed, seeking	7,340	5,720	1,610
Retired	40,570	36,480	4,090
Not employed, not seeking	9,860	4,250	5,610
Scientists:			
Total	318,830	242,230	76,610
Employed full-time	266,890	206,030	60,850
Employed part-time	17,950	9,110	8,840
Unemployed, seeking	3,770	2,870	900
Retired	24,350	21,930	2,420
Not employed, not seeking	5,880	2,280	3,600
Computer and mathematical scientists:			
Total	40,820	35,550	5,280
Employed full-time	36,040	31,730	4,310
Employed part-time	1,400	960	440
Unemployed, seeking	460	400	60
Retired	2,190	2,020	170
Not employed, not seeking	730	440	290
Life and related scientists:			
Total	97,870	73,260	24,610
Employed full-time	82,990	62,080	20,910
Employed part-time	3,000	1,930	1,070
Unemployed, seeking	1,510	1,070	450
Retired	8,430	7,550	880
Not employed, not seeking	1,940	640	1,300
Physical and related scientists:			
Total	75,690	66,830	8,870
Employed full-time	63,150	55,920	7,230
Employed part-time	2,740	2,240	500
Unemployed, seeking	1,200	1,040	170
Retired	7,190	6,830	350
Not employed, not seeking	1,410	800	620
Social and related scientists:			
Total	104,450	66,590	37,860
Employed full-time	84,710	56,310	28,400
Employed part-time	10,800	3,980	6,820
Unemployed, seeking	600	370	230
Retired	6,540	5,520	1,020
Not employed, not seeking	1,800	410	1,390

See explanatory information and SOURCE at end of table.

Table 4. Doctoral scientists and engineers, by broad occupation, employment status, and sex: 1995

Page 2 of 2

Employment status/occupation*	Total	Male	Female
Engineers:			
Total	65,290	61,740	3,550
Employed full-time	56,470	53,410	3,060
Employed part-time	1,960	1,710	250
Unemployed, seeking	880	790	90
Retired	5,440	5,420	S
Not employed, not seeking	530	410	120
Non-S&E occupations:			
Total	158,420	121,970	36,450
Employed full-time	133,110	104,390	28,720
Employed part-time	8,410	4,820	3,590
Unemployed, seeking	2,680	2,060	620
Retired	10,770	9,140	1,640
Not employed, not seeking	3,450	1,560	1,890

*If the respondent was unemployed, occupation of last job was reported.

KEY: S = Suppressed because fewer than 50 weighted cases reported (See NOTE below)

NOTE: All numbers in the table are estimates derived from a sample.
Postdoc employment is included as either employed full-time or employed part-time.

SOURCE: National Science Foundation/SRS, 1995 Survey of Doctorate Recipients

Table 5. Doctoral scientists and engineers, by broad field of doctorate, employment status, and race ethnicity: 1995

Page 1 of 2

Employment status/field of doctorate	Total	White	Black	Asian or Pacific Islander	Hispanic	Native American
All Fields:						
Total	542,540	455,050	11,110	62,430	11,930	1,950
Employed full-time	456,470	376,940	10,070	57,170	10,530	1,720
Employed part-time	28,310	25,660	430	1,500	580	100
Unemployed, seeking	7,340	5,860	130	1,080	240	S
Retired	40,570	38,260	330	1,500	420	60
Not employed, not seeking	9,860	8,330	150	1,190	160	S
Sciences:						
Total	455,530	393,450	9,940	40,190	10,100	1,780
Employed full-time	380,400	324,720	8,980	36,240	8,870	1,550
Employed part-time	25,730	23,550	420	1,120	500	100
Unemployed, seeking	5,920	4,850	120	720	200	S
Retired	34,450	32,580	300	1,120	380	60
Not employed, not seeking	9,040	7,740	110	990	150	S
Computer and mathematical sciences:						
Total	31,740	25,050	440	5,260	930	60
Employed full-time	28,060	21,920	430	4,830	820	S
Employed part-time	1,190	1,050	S	100	S	S
Unemployed, seeking	460	350	S	90	S	S
Retired	1,620	1,450	S	110	60	S
Not employed, not seeking	410	290	S	120	S	S
Life and related sciences:						
Total	149,320	129,140	2,970	13,840	2,870	490
Employed full-time	126,160	108,090	2,630	12,530	2,480	430
Employed part-time	6,030	5,490	80	350	100	S
Unemployed, seeking	2,230	1,800	80	230	110	S
Retired	11,410	10,810	130	350	110	S
Not employed, not seeking	3,490	2,960	60	380	70	S
Physical and related sciences:						
Total	116,550	98,503	1,260	14,330	2,160	270
Employed full-time	96,690	80,210	1,190	13,000	2,010	250
Employed part-time	4,610	4,140	S	370	70	S
Unemployed, seeking	2,000	1,670	S	270	S	S
Retired	11,340	10,940	S	350	S	S
Not employed, not seeking	1,920	1,550	S	330	S	S

See explanatory information and SOURCE at end of table.

Table 5. Doctoral scientists and engineers, by broad field of doctorate, employment status, and race ethnicity: 1995

Page 2 of 2

Employment status/field of doctorate	Total	White	Black	Asian or Pacific Islander	Hispanic	Native American
Social and related sciences:						
Total	157,920	140,750	5,260	6,770	4,140	960
Employed full-time	129,490	114,510	4,720	5,880	3,550	830
Employed part-time	13,900	12,880	320	290	290	80
Unemployed, seeking	1.230	1,030	S	120	60	S
Retired	10,080	9,390	160	310	180	S
Not employed, not seeking	3,130	2,940	S	160	70	S
Engineering:						
Total	87,000	61,600	1,170	22,240	1,830	170
Employed full-time	76,070	52,220	1,090	20,930	1,660	170
Employed part-time	2,580	2,110	S	380	80	S
Unemployed, seeking	1,420	1,020	S	360	S	S
Retired	6,120	5,670	S	380	S	S
Not employed, not seeking	820	590	S	190	S	S

KEY: S = Suppressed because fewer than 50 weighted cases reported (See NOTE below)

NOTE: All numbers in the table are estimates derived from a sample.
Postdoc employment is included as either employed full-time or employed part-time.

SOURCE: National Science Foundation/SRS, 1995 Survey of Doctorate Recipients

Table 6. Doctoral scientists and engineers, by broad occupation, employment status, and race/ethnicity: 1995

Page 1 of 2

Employment status/occupation*	Total	White	Black	Asian or Pacific Islander	Hispanic	Native American
All Occupations						
Total	542,540	455,050	11,110	62,430	11,930	1,950
Employed full-time	456,470	376,940	10,070	57,170	10,530	1,720
Employed part-time	28,310	25,660	430	1,500	580	100
Unemployed, seeking	7,340	5,860	130	1,080	240	S
Retired	40,570	38,260	330	1,500	420	60
Not employed, not seeking	9,860	8,330	150	1,190	160	S
Scientists:						
Total	318,830	272,150	6,270	31,710	7,410	1,240
Employed full-time	266,890	224,770	5,700	28,800	6,510	1,090
Employed part-time	17,950	16,390	220	790	410	100
Unemployed, seeking	3,770	2,980	70	560	140	S
Retired	24,350	23,060	170	850	260	S
Not employed, not seeking	5,880	4,950	110	710	90	S
Computer and mathematical scientists:						
Total	40,820	31,370	550	7,690	1,070	130
Employed full-time	36,040	27,200	550	7,220	960	110
Employed part-time	1,400	1,230	S	100	80	S
Unemployed, seeking	460	360	S	70	S	S
Retired	2,190	2,000	S	150	S	S
Not employed, not seeking	730	570	S	150	S	S
Life and related scientists:						
Total	97,870	83,390	1,550	10,770	1,970	250
Employed full-time	82,990	69,930	1,370	9,750	1,710	220
Employed part-time	3,000	2,660	S	230	S	S
Unemployed, seeking	1,510	1,170	S	200	90	S
Retired	8,430	7,950	60	330	80	S
Not employed, not seeking	1,940	1,680	S	190	S	S
Physical and related scientists:						
Total	75,690	63,910	1,000	9,030	1,570	170
Employed full-time	63,150	52,570	910	8,060	1,470	150
Employed part-time	2,740	2,430	S	250	S	S
Unemployed, seeking	1,200	930	S	240	S	S
Retired	7,190	6,920	S	180	60	S
Not employed, not seeking	1,410	1,070	S	300	S	S

See explanatory information and SOURCE at end of table.

Table 6. Doctoral scientists and engineers, by broad occupation, employment status, and race ethnicity: 1995

Page 2 of 2

Employment status/occupation*	Total	White	Black	Asian or Pacific Islander	Hispanic	Native American
Social and related scientists:						
Total	104,450	93,480	3,160	4,280	2,790	700
Employed full-time	84,710	75,080	2,870	3,760	2,380	610
Employed part-time	10,800	10,070	160	210	240	80
Unemployed, seeking	600	510	S	S	S	S
Retired	6,540	6,190	80	190	90	S
Not employed, not seeking	1,800	1,620	S	70	60	S
Engineers:						
Total	65,290	46,400	840	16,440	1,440	150
Employed full-time	56,470	38,620	810	15,560	1,310	150
Employed part-time	1,960	1,630	S	250	80	S
Unemployed, seeking	880	640	S	210	S	S
Retired	5,440	5,070	S	350	S	S
Not employed, not seeking	530	430	S	70	S	S
Non-S&E occupations:						
Total	158,420	136,500	4,000	14,270	3,080	560
Employed full-time	133,110	113,540	3,560	12,810	2,710	480
Employed part-time	8,410	7,640	210	460	100	S
Unemployed, seeking	2,680	2,250	50	300	70	S
Retired	10,770	10,120	150	300	150	50
Not employed, not seeking	3,450	2,950	S	400	50	S

*If the respondent was unemployed, occupation of last job was reported.

KEY: S = Suppressed because fewer than 50 weighted cases reported (See NOTE below)

NOTE: All numbers in the table are estimates derived from a sample.
Postdoc employment is included as either employed full-time or employed part-time.

SOURCE: National Science Foundation/SRS, 1995 Survey of Doctorate Recipients

Table 7. Selected employment characteristics of doctoral scientists and engineers, by field of doctorate: 1995

[In percent]

Page 1 of 1

Field of doctorate	Unemployment rate	Involuntarily out-of-field rate	Labor force participation rate
Total	1.5	4.2	90.7
Sciences	1.4	4.3	90.5
Computer and mathematical sciences	1.5	3.7	93.6
Computer and information sciences	0.9	1.7	98.7
Mathematical sciences	1.7	4.3	92.3
Life and related sciences	1.7	3.4	90.0
Agricultural and food sciences	1.7	3.4	88.0
Biological and health sciences	1.7	3.3	90.4
Environmental sciences	1.8	5.6	86.3
Physical and related sciences	1.9	6.3	88.6
Chemistry, except biochemistry	2.2	4.6	87.5
Geology and oceanography	2.1	5.3	88.1
Physics and astronomy	1.6	9.5	90.3
Other physical sciences (incl. earth)	S	S	97.8
Social and related sciences	0.9	3.9	91.6
Economics	1.3	1.4	89.4
Political and related sciences	1.1	5.5	91.5
Psychology	0.6	3.1	92.9
Sociology and anthropology	1.0	6.9	90.1
Other social sciences	0.9	6.2	90.0
Engineering	1.8	3.8	92.0
Aerospace/aeronautical	S	2.7	88.9
Chemical	2.7	2.2	89.3
Civil	1.2	2.4	96.8
Electrical/computer	1.7	4.1	92.5
Industrial	2.5	S	95.3
Mechanical	1.4	4.0	93.3
Other engineering	1.8	5.1	91.2

KEY: S = Suppressed because fewer than 50 weighted cases reported (See NOTE below)

NOTE: All numbers in the table are estimates derived from a sample.
See Technical Notes for definition of rates.

SOURCE: National Science Foundation/SRS, 1995 Survey of Doctorate Recipients

Table 8. Selected employment characteristics of doctoral scientists and engineers, by occupation: 1995

[In percent]

Page 1 of 1

Occupation*	Unemployment rate	Involuntarily out-of-field rate	Labor force participation rate
Total	1.5	4.2	90.7
Scientists	1.3	2.5	90.5
Computer and mathematical scientists	1.2	6.9	92.8
Computer and information scientists	1.5	14.6	94.7
Mathematical scientists	1.1	3.2	86.6
Postsecondary teachers, computer and mathematical sciences	1.0	1.8	93.7
Life and related scientists	1.7	1.2	89.4
Agricultural scientists	2.5	S	82.1
Biological scientists	2.5	1.3	89.9
Forestry and conservation scientists	S	S	80.8
Postsecondary teachers, life and related sciences	0.4	1.1	90.9
Physical and related scientists	1.8	2.9	88.6
Chemists, except biochemists	2.0	2.3	88.6
Earth scientists	3.0	3.8	88.3
Physicists and astronomers	2.2	3.3	89.4
Other physical scientists	4.9	7.4	78.9
Postsecondary teachers, physical and related sciences	0.6	2.5	89.3
Social and related scientists	0.6	1.7	92.0
Economists	1.4	1.2	90.4
Political scientists	S	S	77.7
Psychologists	0.5	2.2	94.4
Sociologists and anthropologists	2.6	S	75.0
S&T historians and other social scientists	S	2.4	85.4
Postsecondary teachers, social and related sciences	0.5	1.3	92.1
Engineers	1.5	3.9	90.8
Aerospace and related engineers	1.8	4.5	88.0
Chemical engineers	3.1	2.9	89.3
Civil and architectural engineers	1.9	2.5	96.9
Electric and related engineers	1.6	6.3	91.5
Industrial engineers	S	8.3	99.0
Mechanical engineers	S	7.0	92.1
Other engineers	2.1	4.2	89.3
Postsecondary teachers, engineering	0.5	1.0	91.2
Non-S&E occupations	1.9	7.9	91.0
Managers, administrators, etc.	1.3	4.5	93.6
Health and related occupations	1.8	7.6	91.1
Teachers, except S&E postsecondary teachers	1.2	4.9	89.2
Social services and related occupations	S	8.9	85.7
Technologists, etc.	2.9	21.3	91.1
Sales and marketing occupations	4.2	27.8	91.1
Other non-S&E occupations	5.2	21.0	80.6

*If the respondent was unemployed, occupation of last job was reported.

KEY: S = Suppressed because fewer than 50 weighted cases reported (See NOTE below)

NOTE: All numbers in the table are estimates derived from a sample.
See Technical Notes for definition of rates.

SOURCE: National Science Foundation/SRS, 1995 Survey of Doctorate Recipients

Table 9. Doctoral scientists and engineers, by field of doctorate and sex: 1995

Page 1 of 1

Field of doctorate	Total	Male	Female
Total	542,540	425,930	116,610
Sciences	455,530	343,730	112,160
Computer and mathematical sciences	31,740	27,730	4,010
Computer and information sciences	6,580	5,510	1,040
Mathematical sciences	25,160	22,180	2,980
Life and related sciences	149,320	108,400	40,920
Agricultural and food sciences	17,850	15,420	2,430
Biological and health sciences	126,890	88,780	38,110
Environmental sciences	4,590	4,210	370
Physical and related sciences	116,550	103,880	12,680
Chemistry, except biochemistry	61,350	52,880	8,470
Geology and oceanography	15,180	13,440	1,740
Physics and astronomy	38,730	36,540	2,190
Other physical sciences (incl. earth)	1,300	1,030	270
Social and related sciences	157,920	103,370	54,550
Economics	22,500	19,410	3,090
Political and related sciences	16,330	13,100	3,230
Psychology	82,150	47,420	34,730
Sociology and anthropology	23,030	14,340	8,690
Other social sciences	13,910	9,020	4,810
Engineering	87,000	82,560	4,450
Aerospace/aeronautical	3,810	3,770	S
Chemical	12,590	11,880	710
Civil	7,740	7,380	360
Electrical/computer	22,850	21,920	930
Industrial	2,410	2,210	310
Mechanical	10,560	10,250	310
Other engineering	27,050	25,260	1,790

KEY: S = Suppressed because fewer than 50 weighted cases reported (See NOTE below)

NOTE: All numbers in the table are estimates derived from a sample.

SOURCE: National Science Foundation/SRS, 1995 Survey of Doctorate Recipients

Table 10. Doctoral scientists and engineers, by occupation and sex: 1995

Page 1 of 1

Occupation*	Total	Male	Female
Total	542,540	425,930	116,610
Scientists	318,830	242,230	76,610
Computer and mathematical scientists	40,820	35,550	5,280
Computer and information scientists	15,180	13,570	1,610
Mathematical scientists	7,060	5,810	1,250
Postsecondary teachers, computer and mathematical sciences	18,580	16,170	2,410
Life and related scientists	97,870	73,260	24,610
Agricultural scientists	9,660	8,510	1,150
Biological scientists	54,310	38,310	16,010
Forestry and conservation scientists	1,060	910	150
Postsecondary teachers, life and related sciences	32,840	25,530	7,310
Physical and related scientists	75,690	66,830	8,870
Chemists, except biochemists	24,490	21,070	3,420
Earth scientists	10,030	9,000	1,030
Physicists and astronomers	13,810	12,850	960
Other physical scientists	2,350	2,020	330
Postsecondary teachers, physical and related sciences	25,010	21,880	3,130
Social and related scientists	104,450	66,590	37,860
Economists	6,510	5,100	1,410
Political scientists	1,470	1,170	300
Psychologists	43,650	23,270	20,380
Sociologists and anthropologists	3,550	2,240	1,310
S&T historians and other social scientists	2,500	1,500	1,000
Postsecondary teachers, social and related sciences	46,770	33,310	13,460
Engineers	65,290	61,740	3,550
Aerospace and related engineers	4,200	4,410	150
Chemical engineers	6,520	6,090	430
Civil and architectural engineers	2,930	2,830	110
Electric and related engineers	11,840	11,400	440
Industrial engineers	860	760	100
Mechanical engineers	6,280	6,100	180
Other engineers	15,540	14,400	1,150
Postsecondary teachers, engineering	17,120	16,130	990
Non-S&E occupations	158,420	121,970	36,450
Managers, administrators, etc.	90,710	75,610	15,110
Health and related occupations	15,030	10,550	4,490
Teachers, except S&E postsecondary teachers	21,480	12,190	9,290
Social services and related occupations	2,090	1,360	740
Technologists, etc.	6,030	5,230	800
Sales and marketing occupations	5,570	4,710	870
Other non-S&E occupations	17,500	12,340	5,160

*If the respondent was unemployed, occupation of last job was reported.

NOTE: All numbers in the table are estimates derived from a sample.

SOURCE: National Science Foundation/SRS, 1995 Survey of Doctorate Recipients

Table 11. Doctoral scientists and engineers, by field of doctorate and race ethnicity: 1995

Page 1 of 1

Field of doctorate	Total	White	Black	Asian or Pacific Islander	Hispanic	Native American
Total	542,540	455,050	11,110	62,430	11,930	1,950
Sciences	455,530	393,450	9,940	40,190	10,100	1,780
Computer and mathematical sciences	31,740	25,050	440	5,260	930	160
Computer and information sciences	6,580	4,410	80	1,890	190	S
Mathematical sciences	25,160	20,640	360	3,370	740	S
Life and related sciences	149,320	129,140	2,970	13,840	2,870	490
Agricultural and food sciences	17,850	15,150	240	2,020	430	S
Biological and health sciences	126,890	109,790	2,690	11,580	2,390	430
Environmental sciences	4,590	4,200	S	220	S	50
Physical and related sciences	116,550	98,500	1,260	14,330	2,160	270
Chemistry, except biochemistry	61,350	51,250	890	7,730	1,320	170
Geology and oceanography	15,180	13,910	S	950	250	S
Physics and astronomy	38,730	32,240	310	5,520	590	S
Other physical sciences (incl. earth)	1,300	1,110	S	130	S	S
Social and related sciences	157,920	140,750	5,260	6,770	4,140	960
Economics	22,500	19,330	510	2,200	400	80
Political and related sciences	16,330	14,140	800	790	480	110
Psychology	82,150	75,290	2,560	1,650	2,170	480
Sociology and anthropology	23,030	20,420	900	810	720	160
Other social sciences	13,910	11,600	500	1,320	380	130
Engineering	87,000	61,600	1,170	22,240	1,830	170
Aerospace/aeronautical	3,810	2,950	70	720	80	S
Chemical	12,590	8,990	150	3,120	320	S
Civil	7,740	5,180	140	2,180	220	S
Electrical/computer	22,850	15,950	290	6,020	530	60
Industrial	2,410	1,770	S	550	S	S
Mechanical	10,560	7,100	160	3,120	160	S
Other engineering	27,050	19,660	330	6,520	470	60

KEY: S = Suppressed because fewer than 50 weighted cases reported (See NOTE below)

NOTE: All numbers in the table are estimates derived from a sample.

SOURCE: National Science Foundation/SRS, 1995 Survey of Doctorate Recipients

Table 12. Doctoral scientists and engineers, by occupation and race/ethnicity: 1995

Page 1 of 2

Occupation*	Total	White	Black	Asian or Pacific Islander	Hispanic	Native American
Total	542,540	455,050	11,110	62,430	11,930	1,950
Scientists	318,830	272,150	6,270	31,710	7,410	1,240
Computer and mathematical scientists	40,820	31,370	550	7,690	1,070	130
Computer and information scientists	15,180	11,070	100	3,630	320	60
Mathematical scientists	7,060	5,440	120	1,340	160	S
Postsecondary teachers, computer and mathematical sciences	18,580	14,860	330	2,720	600	60
Life and related scientists	97,870	83,390	1,550	10,770	1,970	250
Agricultural scientists	9,660	8,430	90	860	280	S
Biological scientists	54,310	44,160	710	8,070	1,170	190
Forestry and conservation scientists	1,060	1,010	S	S	S	S
Postsecondary teachers, life and related sciences	32,840	29,790	720	1,770	520	S
Physical and related scientists	75,690	63,910	1,000	9,030	1,570	170
Chemists, except biochemists	24,490	19,380	440	4,100	520	S
Earth scientists	10,030	9,080	S	750	150	S
Physicists and astronomers	13,810	11,510	70	2,020	220	S
Other physical scientists	2,350	1,980	S	250	80	S
Postsecondary teachers, physical and related sciences	25,010	21,960	430	1,930	610	80
Social and related scientists	104,450	93,480	3,160	4,280	2,790	970
Economists	6,510	5,310	120	850	160	60
Political scientists	1,470	1,220	S	100	110	S
Psychologists	43,650	40,260	1,200	770	1,100	300
Sociologists and anthropologists	3,550	3,370	70	70	S	S
S&T historians and other social scientists	2,500	2,150	70	210	60	S
Postsecondary teachers, social and related sciences	46,770	41,160	1,650	2,280	1,320	320
Engineers	65,290	46,400	840	16,440	1,440	150
Aerospace and related engineers	4,200	3,160	S	930	60	S
Chemical engineers	6,520	4,500	110	1,770	150	S
Civil and architectural engineers	2,930	1,600	50	1,170	110	S
Electric and related engineers	11,840	8,050	110	3,430	210	S
Industrial engineers	860	610	S	230	S	S
Mechanical engineers	6,280	3,900	50	2,190	110	S
Other engineers	15,540	11,390	140	3,700	290	S
Postsecondary teachers, engineering	17,120	13,200	340	3,030	480	70

See explanatory information and SOURCE at end of table.

Table 12. Doctoral scientists and engineers, by occupation and race ethnicity: 1995

Page 2 of 2

Occupation*	Total	White	Black	Asian or Pacific Islander	Hispanic	Native American
Non-S&E occupations	158,420	136,500	4,000	14,270	3,080	560
Managers, administrators, etc	90,710	78,640	2,260	7,830	1,730	260
Health and related occupations	15,030	12,600	340	1,790	250	50
Teachers, except S&E postsecondary teachers	21,480	18,630	800	1,490	450	110
Social services and related occupations	2,090	1,840	110	90	S	S
Technologists, etc	6,030	4,680	70	1,180	90	S
Sales and marketing occupations	5,570	4,730	60	600	170	S
Other non-S&E occupations	17,500	15,390	360	1,300	350	100

*If the respondent was unemployed, occupation of last job was reported.

KEY: S = Suppressed because fewer than 50 weighted cases reported (See NOTE below)

NOTE: All numbers in the table are estimates derived from a sample.

SOURCE: National Science Foundation/SRS, 1995 Survey of Doctorate Recipients

Table 13. Doctoral scientists and engineers, by field of doctorate and citizenship status: 1995

Page 1 of 1

Field of doctorate	Total	U.S. Citizen			Non-U.S. Citizen		
		Total	Native	Naturalized	Total	Permanent resident	Temporary resident
Total	542,540	499,890	441,080	58,820	42,640	35,480	7,070
Sciences	455,530	426,410	386,750	39,660	29,120	24,180	4,920
Computer and mathematical sciences	31,740	27,150	23,400	3,750	4,590	3,740	850
Computer and information sciences	6,580	4,720	3,990	720	1,860	1,550	310
Mathematical sciences	25,160	22,440	19,410	3,030	2,720	2,190	540
Life and related sciences	149,320	140,150	127,180	12,970	9,170	7,440	1,710
Agricultural and food sciences	17,850	16,490	14,660	1,840	1,360	1,060	280
Biological and health sciences	126,890	119,290	108,440	10,850	7,600	6,210	1,390
Environmental sciences	4,590	4,370	4,090	280	210	170	S
Physical and related sciences	116,550	107,720	94,760	12,960	8,830	7,410	1,420
Chemistry, except biochemistry	61,350	57,310	50,370	6,940	4,040	3,540	500
Geology and oceanography	15,180	14,220	13,150	1,070	960	790	170
Physics and astronomy	38,730	35,020	30,120	4,900	3,710	2,980	730
Other physical sciences (incl. earth)	1,300	1,180	1,120	60	120	100	S
Social and related sciences	157,920	151,390	141,410	9,980	6,530	5,580	940
Economics	22,500	20,290	17,990	2,300	2,210	1,740	470
Political and related sciences	16,330	15,490	14,060	1,420	840	700	140
Psychology	82,150	80,710	77,500	3,210	1,440	1,340	100
Sociology and anthropology	23,030	22,140	20,650	1,500	890	780	90
Other social sciences	13,910	12,760	11,210	1,550	1,150	1,020	140
Engineering	87,000	73,480	54,320	19,160	13,520	11,310	2,150
Aerospace/aeronautical	3,810	3,410	2,660	750	400	280	100
Chemical	12,590	11,020	8,380	2,630	1,570	1,310	260
Civil	7,740	6,260	4,060	2,200	1,480	1,250	210
Electrical/computer	22,850	18,990	13,540	5,450	3,860	3,250	590
Industrial	2,410	2,020	1,580	440	400	360	S
Mechanical	10,560	8,520	6,210	2,300	2,040	1,760	280
Other engineering	27,050	23,270	17,880	5,390	3,780	3,100	680

KEY: S = Suppressed because fewer than 50 weighted cases reported (See NOTE below)

NOTE: All numbers in the table are estimates derived from a sample.

SOURCE: National Science Foundation/SRS, 1995 Survey of Doctorate Recipients

Table 14. Doctoral scientists and engineers, by occupation and citizenship status: 1995

Page 1 of 2

Occupation*	Total	U.S. Citizen			Non-U.S. Citizen		
		Total	Native	Naturalized	Total	Permanent resident	Temporary resident
Total	542,540	499,890	441,080	58,820	42,640	35,480	7,070
Scientists	318,830	293,110	264,900	28,230	25,720	20,770	4,890
Computer and mathematical scientists	40,820	34,400	28,780	5,620	6,420	5,170	1,230
Computer and information scientists	15,180	12,390	10,140	2,260	2,780	2,200	590
Mathematical scientists	7,060	6,080	5,130	940	990	830	160
Postsecondary teachers, computer and mathematical sciences	18,580	15,930	13,510	2,420	2,650	2,140	490
Life and related scientists	97,870	89,940	81,550	8,390	7,930	6,170	1,740
Agricultural scientists	9,660	9,020	8,330	690	640	470	170
Biological scientists	54,310	47,870	42,720	5,160	6,440	4,960	1,460
Forestry and conservation scientists	1,060	1,030	960	80	S	S	S
Postsecondary teachers, life and related sciences	32,840	32,010	29,540	2,480	830	720	110
Physical and related scientists	75,690	69,080	61,000	8,080	6,620	5,410	1,200
Chemists, except biochemists	24,490	21,990	18,840	3,150	2,500	2,200	310
Earth scientists	10,030	9,340	8,550	790	700	560	140
Physicists and astronomers	13,810	12,020	10,460	1,560	1,790	1,210	580
Other physical scientists	2,350	2,180	1,870	310	170	160	S
Postsecondary teachers, physical and related sciences	25,010	23,560	21,290	2,270	1,450	1,280	170
Social and related scientists	104,450	99,690	93,550	6,140	4,760	4,020	730
Economists	6,510	5,700	4,970	730	810	550	260
Political scientists	1,470	1,390	1,190	200	90	60	S
Psychologists	43,650	42,930	41,180	1,740	730	680	S
Sociologists and anthropologists	3,550	3,500	3,350	150	S	S	S
S&T historians and other social scientists	2,500	2,330	2,120	210	160	130	S
Postsecondary teachers, social and related sciences	46,770	43,840	40,730	3,100	2,930	2,550	370
Engineers	65,290	54,870	41,730	13,130	10,420	8,950	1,430
Aerospace and related engineers	4,200	3,830	2,860	960	370	270	90
Chemical engineers	6,520	5,450	4,030	1,420	1,070	880	190
Civil and architectural engineers	2,930	2,180	1,360	830	750	640	110
Electric and related engineers	11,840	9,870	7,280	2,590	1,960	1,640	330
Industrial engineers	860	620	520	100	240	210	S
Mechanical engineers	6,280	4,880	3,450	1,420	1,400	1,190	220
Other engineers	15,540	13,270	10,710	2,530	2,280	1,940	330
Postsecondary teachers, engineering	17,120	14,220	11,510	3,250	2,350	2,190	170

See explanatory information and SOURCE at end of table.

Table 14. Doctoral scientists and engineers, by occupation and citizenship status: 1995

Page 2 of 2

Occupation*	Total	U.S. Citizen			Non-U.S. Citizen		
		Total	Native	Naturalized	Total	Permanent resident	Temporary resident
Non-S&E occupations	158,420	151,910	134,460	17,450	6,510	5,760	450
Managers, administrators, etc.	90,710	88,130	77,910	10,220	2,580	2,360	230
Health and related occupations	15,030	14,230	12,230	2,000	800	720	80
Teachers, except S&E postsecondary teachers	21,480	20,420	18,330	2,090	1,060	970	90
Social services and related occupations	2,090	1,980	1,870	120	110	100	S
Technologists, etc.	6,030	5,330	4,480	840	710	560	150
Sales and marketing occupations	5,570	5,190	4,380	810	390	330	60
Other non-S&E occupations	17,500	16,630	15,260	1,380	860	730	130

*If the respondent was unemployed, occupation of last job was reported.

KEY: S = Suppressed because fewer than 50 weighted cases reported (See NOTE below)

NOTE: All numbers in the table are estimates derived from a sample.

SOURCE: National Science Foundation/SRS, 1995 Survey of Doctorate Recipients

Table 15. Doctoral scientists and engineers, by field of doctorate and age: 1995

Page 1 of 1

Field of doctorate	Total	Under 30	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-75
Total	542,540	8,670	53,220	79,710	87,900	91,850	84,850	51,930	35,070	49,310
Sciences	455,530	6,630	40,710	64,340	75,380	80,540	72,390	43,060	29,830	42,660
Computer and mathematical sciences	31,740	790	3,530	5,080	4,670	5,600	5,660	3,170	1,670	1,580
Computer and information sciences	6,580	290	1,530	2,030	1,510	900	240	60	S	S
Mathematical sciences	25,160	500	2,010	3,050	3,170	4,690	5,420	3,110	1,660	1,560
Life and related sciences	149,320	2,160	14,060	23,190	27,430	25,600	21,490	13,100	8,820	13,480
Agricultural and food sciences	17,850	150	1,300	2,780	3,330	2,470	2,460	1,710	1,580	2,080
Biological and health sciences	126,890	2,010	12,600	19,860	23,320	22,040	18,140	10,980	6,960	10,970
Environmental sciences	4,590	S	150	550	770	1,090	890	410	290	440
Physical and related sciences	116,550	2,330	12,880	16,620	15,100	16,660	18,520	12,430	8,960	13,060
Chemistry, except biochemistry	61,350	1,400	6,930	9,290	7,720	7,600	9,540	6,570	4,710	7,600
Geology and oceanography	15,180	110	1,390	2,110	2,510	2,610	2,200	1,510	1,300	1,440
Physics and astronomy	38,730	800	4,340	4,950	4,610	6,150	6,640	4,340	2,920	3,980
Other physical sciences (incl. earth)	1,300	S	220	270	260	300	140	S	S	S
Social and related sciences	157,920	1,360	10,250	19,450	28,180	32,680	26,720	14,370	10,380	14,540
Economics	22,500	310	1,710	3,230	3,080	3,840	3,630	2,380	1,660	2,670
Political and related sciences	16,330	170	840	1,670	2,460	3,000	3,380	1,320	1,430	2,070
Psychology	82,150	790	6,050	10,950	16,560	18,170	12,260	6,480	4,680	6,190
Sociology and anthropology	23,030	80	820	2,080	3,810	4,850	4,600	2,770	1,510	2,510
Other social sciences	13,910	S	840	1,520	2,270	2,820	2,840	1,420	1,100	1,110
Engineering	87,000	2,070	12,530	15,370	12,510	11,310	12,470	8,880	5,240	6,650
Aerospace/aeronautical	3,810	110	470	510	390	440	690	550	340	320
Chemical	12,590	350	2,140	2,290	1,400	1,510	1,710	1,300	720	1,170
Civil	7,740	80	950	1,330	1,180	1,020	1,310	870	630	360
Electrical/computer	22,850	580	3,760	4,170	3,230	2,960	3,180	2,380	900	1,700
Industrial	2,410	70	200	440	420	260	460	230	110	220
Mechanical	10,560	240	1,500	2,310	1,450	1,490	1,390	850	710	630
Other engineering	27,050	640	3,490	4,330	4,440	3,630	3,730	2,700	1,830	2,260

KEY: S = Suppressed because fewer than 50 weighted cases reported (See NOTE below)

NOTE: All numbers in the table are estimates derived from a sample.

SOURCE: National Science Foundation/SRS, 1995 Survey of Doctorate Recipients

Table 16. Doctoral scientists and engineers, by occupation and age: 1995

Page 1 of 2

Occupation*	Total	Under 30	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-75
Total	542,540	8,700	53,220	79,710	87,890	91,850	84,850	51,930	35,070	49,310
Scientists	318,830	6,100	35,880	51,800	53,270	51,410	43,700	27,040	19,430	30,210
Computer and mathematical scientists	40,820	1,010	4,780	6,720	6,770	6,990	6,530	3,610	2,040	2,370
Computer and information scientists	15,180	410	2,080	2,820	2,920	2,940	2,130	830	470	580
Mathematical scientists	7,060	130	780	1,150	1,210	1,310	960	640	350	540
Postsecondary teachers, computer and mathematical sciences	18,580	460	1,920	2,740	2,640	2,740	3,450	2,150	1,230	1,250
Life and related scientists	97,870	1,900	12,410	17,590	17,710	14,270	11,830	7,110	5,360	9,690
Agricultural scientists	9,660	70	770	1,520	1,730	1,230	1,170	750	770	1,650
Biological scientists	54,310	1,690	9,810	11,280	10,110	7,250	4,880	2,900	1,930	4,470
Forestry and conservation scientists	1,060	S	S	180	240	130	120	80	100	160
Postsecondary teachers, life and related sciences	32,840	120	1,800	4,620	5,630	5,660	5,670	3,380	2,570	3,400
Physical and related scientists	75,690	1,930	10,270	12,530	10,290	9,570	9,700	7,670	5,500	8,240
Chemists, except biochemists	24,490	900	4,070	4,830	3,600	2,790	2,450	1,890	1,380	2,600
Earth scientists	10,030	S	1,100	1,550	1,650	1,760	1,420	930	610	960
Physicists and astronomers	13,810	620	2,430	2,350	1,560	1,860	1,530	1,170	920	1,360
Other physical scientists	2,350	70	120	420	430	310	390	190	180	250
Postsecondary teachers, physical and related sciences	25,010	300	2,550	3,370	3,040	2,850	3,920	3,490	2,410	3,070
Social and related scientists	104,450	1,260	8,420	14,960	18,510	20,580	15,630	8,640	6,520	9,920
Economists	6,510	220	640	1,270	940	1,370	670	490	220	710
Political scientists	1,470	50	110	160	130	250	160	180	90	360
Psychologists	43,650	590	3,640	6,750	9,230	9,810	6,020	2,820	1,980	2,830
Sociologists and anthropologists	3,550	S	220	320	680	580	390	370	240	740
S&T historians and other social scientists	2,500	S	100	290	540	550	420	150	220	210
Postsecondary teachers, social and related sciences	46,770	380	3,720	6,190	6,990	8,030	7,970	4,650	3,770	5,080

See explanatory information and SOURCE at end of table.

Table 16 Doctoral scientists and engineers, by occupation and age: 1995

Page 2 of 2

Occupation*	Total	Under 30	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-75
Engineers	65,290	1,650	10,100	12,310	9,180	8,180	7,600	6,220	4,240	5,820
Aerospace and related engineers	4,200	90	500	650	610	580	470	570	320	430
Chemical engineers	6,520	280	1,410	1,340	710	570	780	430	420	590
Civil and architectural engineers	2,930	S	430	540	480	330	550	210	190	170
Electric and related engineers	11,840	360	2,350	2,120	1,770	1,450	1,290	1,130	380	1000
Industrial engineers	860	S	170	210	140	90	100	70	S	S
Mechanical engineers	6,280	200	930	1,350	950	830	730	600	400	290
Other engineers	15,540	430	2,410	2,630	2,380	2,280	1,640	1,230	850	1,670
Postsecondary teachers, engineering	17,120	250	1,910	3,460	2,140	2,040	2,050	1,990	1,640	1,650
Non-S&E occupations	158,420	950	7,250	15,610	25,440	32,260	33,560	18,680	11,400	13,280
Managers, administrators, etc.	90,710	170	2,580	7,570	13,990	19,950	21,920	12,210	6,040	6,280
Health and related occupations	15,030	250	1,470	2,270	2,600	2,530	2,380	1,430	940	1,170
Teachers, except S&E postsecondary teachers	21,480	100	930	2,340	3,890	4,260	4,000	2,010	1,940	2,020
Social services and related occupations	2,090	S	90	100	410	430	360	230	140	320
Technologists, etc.	6,030	140	820	1,100	1,120	910	940	340	310	360
Sales and marketing occupations	5,570	S	330	450	910	1,270	940	760	490	380
Other non-S&E occupations	17,500	230	1,020	1,790	2,520	2,910	3,010	1,700	1,550	2,760

*If the respondent was unemployed, occupation of last job was reported.

KEY: S = Suppressed because fewer than 50 weighted cases reported (See NOTE below)

NOTE: All numbers in the table are estimates derived from a sample.

SOURCE: National Science Foundation/SRS, 1995 Survey of Doctorate Recipients

Table 13. Doctoral scientists and engineers employed in universities and 4-year colleges, by broad field of doctorate, sex, and academic rank: 1995

Page 1 of 1

Field of doctorate/sex	Total	Full Professor	Associate professor	Assistant professor	Instructor/ lecturer	Adjunct faculty	Other faculty	Does not apply
Total (number)	222,530	78,600	49,800	42,110	5,650	4,290	3,960	38,140
Male (percent)	76.6	88.9	76.5	65.2	53.7	63.7	79.9	68.7
Female (percent)	23.4	11.1	23.5	34.8	46.3	36.3	20.1	31.3
Sciences (number)	196,870	69,280	43,550	37,380	5,290	3,820	3,430	34,120
Male (percent)	74.4	87.6	73.8	62.6	51.0	60.7	77.1	66.3
Female (percent)	25.6	12.4	26.2	37.4	49.0	39.3	22.9	33.7
Computer and mathematical sciences (number)	17,830	6,880	5,430	3,700	500	190	200	930
Male (percent)	87.5	93.2	89.9	80.9	55.4	47.8	91.5	81.1
Female (percent)	12.5	6.8	10.1	19.1	44.6	52.2	S	18.9
Life and related sciences (number)	72,120	22,780	14,780	14,710	1,920	1,240	1,510	15,180
Male (percent)	70.3	85.5	68.5	60.2	56.4	62.2	69.1	61.5
Female (percent)	29.7	14.5	31.5	39.8	43.6	37.8	30.9	38.5
Physical and related sciences (number)	38,290	13,840	6,040	5,190	800	700	940	10,780
Male (percent)	88.5	96.4	90.4	75.4	67.9	85.5	91.2	85.2
Female (percent)	11.5	3.6	9.6	24.6	32.1	14.5	8.8	14.8
Social and related sciences (number)	68,630	25,780	17,300	13,780	2,070	1,690	780	7,240
Male (percent)	67.5	83.3	67.4	55.4	38.3	50.6	71.8	46.4
Female (percent)	32.5	16.7	32.6	44.6	61.7	49.4	28.2	53.6
Engineering (number)	25,660	9,320	6,250	4,720	360	470	530	4,010
Male (percent)	93.5	98.3	95.2	85.6	93.5	88.6	97.9	89.2
Female (percent)	6.5	1.7	4.8	14.4	S	11.4	S	10.8

KEY: S = Suppressed because fewer than 50 weighted cases reported (See NOTE below)

NOTE: All numbers in the table are estimates derived from a sample.

SOURCE: National Science Foundation/SRS, 1995 Survey of Doctorate Recipients

Table 16. Doctoral scientists and engineers employed in universities and 4-year colleges, by broad field of doctorate, sex, and tenure status: 1995

Page 1 of 1

Field of doctorate/sex	Total	Tenured	Not tenured: In tenure track	Not tenured: Not in track	Not applicable
Total (number)	222,530	115,850	36,830	21,500	48,360
Male (percent)	76.6	84.7	67.5	63.8	70.0
Female (percent)	23.4	15.3	32.5	36.2	30.0
Sciences (number)	196,870	101,930	32,160	19,480	43,310
Male (percent)	74.4	83.0	64.7	61.1	67.5
Female (percent)	25.6	17.0	35.3	38.9	32.5
Computer and mathematical sciences	17,830	11,650	3,510	980	1,700
Male (percent)	87.5	92.3	81.3	68.4	78.0
Female (percent)	12.5	7.7	18.7	31.6	22.0
Life and related sciences (number)	72,120	32,320	12,350	8,790	18,670
Male (percent)	70.3	80.2	61.2	60.9	63.6
Female (percent)	29.7	19.8	38.8	39.1	36.4
Physical and related sciences (number)	38,290	18,250	4,400	3,790	11,850
Male (percent)	88.5	94.4	80.6	79.3	85.4
Female (percent)	11.5	5.6	19.4	20.7	14.6
Social and related sciences (number)	68,630	39,710	11,900	5,930	11,090
Male (percent)	67.5	77.3	57.5	48.4	53.4
Female (percent)	32.5	22.7	42.5	51.6	46.6
Engineering (number)	25,660	13,920	4,670	2,020	5,060
Male (percent)	93.5	97.1	86.9	89.9	91.2
Female (percent)	6.5	2.9	13.1	10.1	8.8

NOTE: All numbers in the table are estimates derived from a sample.

SOURCE: National Science Foundation/SRS, 1995 Survey of Doctorate Recipients

Table 19. Doctoral scientists and engineers employed in universities and 4-year colleges, by broad field of doctorate, primary work activity, and second~~ary work activity~~: 1995

Page 1 of 2

Field of doctorate/ primary work activity	Total	Secondary work activity: Total	R&D	Teaching	Management, sales, and administration	Computer applications	Other	No secondary activity
		[Percentage Distribution]						
All fields								
Total	222,530	100.0	42.7	21.3	17.0	5.3	7.2	6.4
R&D	88,910	100.0	26.9	41.0	16.2	7.3	3.8	4.8
Teaching	96,880	100.0	63.1	D	13.2	4.5	10.3	8.8
Management, sales, and administration	21,010	100.0	24.0	28.6	33.2	2.8	10.0	1.3
Computer applications	2,880	100.0	53.4	15.2	20.2	D	5.8	5.4
Other activities	12,860	100.0	26.6	35.1	24.8	2.7	2.2	8.6
Sciences								
Total	196,870	100.0	41.4	21.6	17.3	5.1	7.7	6.8
R&D	78,850	100.0	26.0	41.3	16.6	6.8	4.2	5.1
Teaching	84,770	100.0	61.7	D	13.2	4.5	11.2	9.4
Management, sales, and administration	18,510	100.0	22.7	28.9	33.6	3.0	10.6	1.1
Computer applications	2,360	100.0	48.6	17.0	21.6	D	6.8	6.1
Other activities	12,380	100.0	26.6	34.7	25.4	2.5	1.9	8.8
Computer and mathematical sciences								
Total	17,830	100.0	44.7	21.0	11.2	10.2	5.5	7.4
R&D	4,560	100.0	11.6	65.4	9.0	9.8	1.1	3.1
Teaching	11,290	100.0	61.9	D	8.7	11.2	7.9	10.3
Management, sales, and administration	1,240	100.0	15.5	33.8	39.9	8.2	S	S
Computer applications	440	100.0	36.2	36.0	22.0	D	S	S
Other activities	300	100.0	32.6	59.3	S	S	S	S
Life and related sciences								
Total	72,120	100.0	37.7	23.5	20.5	3.6	7.3	7.3
R&D	38,710	100.0	28.6	34.1	21.0	4.4	5.0	7.0
Teaching	20,890	100.0	59.1	D	15.3	3.3	12.6	9.8
Management, sales, and administration	6,530	100.0	26.7	27.0	35.1	1.6	8.5	1.0
Computer applications	420	100.0	60.3	S	21.3	D	12.2	S
Other activities	5,580	100.0	32.8	35.2	19.3	2.7	2.0	8.0
Physical and related sciences								
Total	38,290	100.0	43.3	19.9	15.4	9.6	4.6	7.1
R&D	17,920	100.0	31.7	35.4	12.3	14.3	2.2	4.2
Teaching	14,680	100.0	60.1	D	14.9	6.5	7.3	11.2
Management, sales, and administration	3,420	100.0	34.7	23.0	28.9	3.5	6.8	3.1
Computer applications	1,140	100.0	56.7	10.8	19.0	D	S	10.2
Other activities	1,130	100.0	21.8	33.5	27.9	5.0	S	9.0

See explanatory information and SOURCE at end of table

Table 19. Doctoral scientists and engineers employed in universities and 4-year colleges, by broad field of doctorate, primary work activity, and secondary work activity: 1995

Page 2 of 2

Field of doctorate/ primary work activity	Total	Secondary work activity						
		Total	R&D	Teaching	Management, sales, and administration	Computer applications	Other	No secondary activity
		[Percentage Distribution]						
Social and related sciences								
Total	68,630	100.0	43.3	20.8	16.7	2.8	10.4	6.1
R&D	17,660	100.0	18.3	56.8	13.4	3.9	5.1	2.4
Teaching	37,920	100.0	63.7	D	12.7	2.4	12.9	8.3
Management, sales, and administration	7,310	100.0	14.8	32.6	33.4	3.0	15.9	S
Computer applications	370	100.0	25.0	25.7	29.3	D	14.6	S
Other activities	5,370	100.0	20.8	33.1	32.6	1.6	1.8	10.1
Engineering								
Total	25,660	100.0	53.0	18.8	14.7	6.9	3.3	3.3
R&D	10,060	100.0	33.8	38.9	12.7	11.2	1.3	2.0
Teaching	12,110	100.0	73.1	D	13.4	4.6	4.4	4.5
Management, sales, and administration	2.500	100.0	33.5	26.4	30.3	S	5.4	2.4
Computer applications	520	100.0	75.6	S	14.2	D	S	S
Other activities	490	100.0	25.8	43.8	S	S	S	S

KEY: S = Suppressed because fewer than 50 weighted cases reported (See NOTE below)
D = The same work activity cannot be reported for both primary and secondary.

NOTE: All numbers in the table are estimates derived from a sample.

SOURCE: National Science Foundation/SRS, 1995 Survey of Doctorate Recipients

Table 20. Employed doctoral scientists and engineers, by field of doctorate and sector of employment: 1995

Page 1 of 1

Field of doctorate	Total	Universities and 4-year colleges	Other educational institutions	Private-for-profit	Self-employed	Private not-for-profit	Federal government	State and local government	Other sector
Total	484,780	222,530	12,410	146,720	28,550	23,840	34,650	13,330	2,750
Sciences	406,130	196,870	12,040	104,430	26,140	21,580	29,820	12,690	2,570
Computer and mathematical sciences	29,250	17,830	690	7,940	570	880	1,100	150	90
Computer and information sciences	6,440	3,160	70	2,780	90	130	150	S	S
Mathematical sciences	22,820	14,670	620	5,160	480	750	960	110	60
Life and related sciences	132,190	72,120	2,970	30,800	4,430	6,330	11,740	3,420	380
Agricultural and food sciences	15,440	7,260	290	4,930	750	360	1,540	270	S
Biological and health sciences	112,870	63,370	2,630	24,990	3,580	5,880	9,250	2,850	320
Environmental sciences	3,890	1,490	50	880	100	90	950	300	S
Physical and related sciences	101,300	38,290	2,380	43,790	2,910	4,110	8,390	1,150	280
Chemistry, except biochemistry	52,540	16,000	1,410	29,020	1,420	1,500	2,480	540	170
Geology and oceanography	13,090	6,090	270	2,970	500	610	2,300	320	S
Physics and astronomy	34,410	15,730	680	11,540	950	1,930	3,340	180	70
Other physical sciences (incl. earth)	1,260	470	S	260	S	80	280	110	S
Social and related sciences	143,390	68,630	6,010	21,900	18,230	10,250	8,580	7,970	1,820
Economics	19,860	12,190	240	2,280	830	650	2,050	430	1,180
Political and related sciences	14,790	9,710	450	1,250	740	750	1,050	740	100
Psychology	75,810	26,210	4,000	14,510	15,130	6,870	3,600	5,270	220
Sociology and anthropology	20,530	13,350	900	1,790	1,030	1,320	1,110	900	140
Other social sciences	12,410	7,180	410	2,070	510	670	770	640	180
Engineering	78,650	25,660	370	42,300	2,410	2,270	4,830	630	180
Aerospace/aeronautical	3,350	1,190	S	1,370	250	100	420	S	S
Chemical	10,930	2,360	70	7,400	340	320	380	S	60
Civil	7,400	3,100	S	3,120	220	200	460	260	S
Electrical/computer	20,780	6,280	70	12,390	560	480	950	S	S
Industrial	2,240	1,270	S	700	90	70	100	S	S
Mechanical	9,710	3,170	80	5,270	220	360	560	S	S
Other engineering	24,230	8,300	100	12,050	720	750	1,960	290	60

KEY: S = Suppressed because fewer than 50 weighted cases reported (See NOTE below)

NOTE: All numbers in the table are estimates derived from a sample.

SOURCE: National Science Foundation/SRS, 1995 Survey of Doctorate Recipients

Table 21. Employed doctoral scientists and engineers, by occupation and sector of employment: 1995

Page 1 of 2

Occupation	Total	Universities and 4-year colleges	Other educational institutions	Private-for-profit	Self-employed	Private not-for-profit	Federal government	State and local government	Other sector
Total	484,780	222,530	12,410	146,720	28,550	23,840	34,650	13,330	2,750
Scientists	284,840	157,210	7,590	61,310	17,650	12,570	20,300	6,740	1,470
Computer and mathematical scientists	37,440	19,440	800	12,990	760	1,350	1,610	400	90
Computer and information scientists	14,170	1,480	S	10,670	530	700	480	230	S
Mathematical scientists	6,050	1,450	S	2,320	230	660	1,120	170	S
Postsecondary teachers, computer and mathematical sciences	17,230	16,500	730	S	S	S	S	S	S
Life and related scientists	85,990	56,200	1,530	14,340	1,210	3,450	7,690	1,420	160
Agricultural scientists	7,730	3,300	S	2,490	350	160	1,260	130	S
Biological scientists	47,650	24,500	S	11,700	760	3,190	6,120	1,230	110
Forestry and conservation scientists	850	180	S	140	90	60	310	60	S
Postsecondary teachers, life and related sciences	29,760	28,210	1,480	S	S	S	S	S	S
Physical and related scientists	65,900	31,920	1,500	22,170	1,200	2,160	6,220	600	130
Chemists, except biochemists	21,270	2,910	S	15,500	470	520	1,570	210	90
Earth scientists	8,590	2,790	S	2,310	350	580	2,290	270	S
Physicists and astronomers	12,080	5,160	S	3,370	290	980	2,180	70	S
Other physical scientists	1,760	400	S	950	90	80	170	60	S
Postsecondary teachers, physical and related sciences	22,190	20,670	1,500	S	S	S	S	S	S
Social and related scientists	95,510	49,660	3,750	11,810	14,480	5,610	4,790	4,320	1,090
Economists	5,800	1,030	S	1,620	390	280	1,390	210	880
Political scientists	1,110	540	S	130	S	150	240	S	S
Psychologists	41,010	5,300	1,940	9,540	13,630	4,530	2,370	3,560	160
Sociologists and anthropologists	2,600	930	S	280	300	330	460	250	S
S&T historians and other social scientists	2,130	870	S	220	150	310	280	250	S
Postsecondary teachers, social and related sciences	42,870	41,000	1,770	S	S	S	50	S	S

See explanatory information and SOURCE at end of table.

Table 21. Employed doctoral scientists and engineers, by occupation and sector of employment: 1995

Page 2 of 2

Occupation	Total	Universities and 4-year colleges	Other educational institutions	Private-for-profit	Self-employed	Private not-for-profit	Federal government	State and local government	Other sector
Engineers	58,430	20,970	140	30,100	1,750	1,410	3,380	510	170
Aerospace and related engineers	3,630	320	S	2,240	150	240	670	S	S
Chemical engineers	5,640	570	S	4,530	170	150	200	S	S
Civil and architectural engineers	2,790	380	S	1,580	250	80	270	200	S
Electric and related engineers	10,660	1,070	S	8,070	500	340	630	S	S
Industrial engineers	840	220	S	560	S	S	S	S	S
Mechanical engineers	5,770	760	S	4,180	230	190	370	S	S
Other engineers	13,590	2,250	S	8,950	430	380	1,230	270	90
Postsecondary teachers, engineering	15,530	15,400	130	S	S	S	S	S	S
Non-S&E occupations	141,520	44,350	4,680	55,310	9,150	9,870	10,970	6,080	1,110
Managers, administrators, etc	83,820	21,270	1,290	39,440	1,930	6,500	8,260	4,260	860
Health and related occupations	13,450	4,760	90	3,750	1,780	1,220	1,110	580	150
Teachers, except S&E postsecondary teachers	18,920	15,960	2,830	S	60	S	50	S	S
Social services and related occupations	1,770	230	340	S	60	800	70	220	S
Technologists, etc	5,340	760	S	3,570	360	190	290	130	S
Sales and marketing occupations	4,870	S	S	3,620	1,040	140	S	S	S
Other non-S&E occupations	13,360	1,340	110	4,880	3,910	1,020	1,160	880	70

KEY: S = Suppressed because fewer than 50 weighted cases reported (See NOTE below)

NOTE: All numbers in the table are estimates derived from a sample.

SOURCE: National Science Foundation/SRS, 1995 Survey of Doctorate Recipients

Table 22. Employed doctoral scientists and engineers, by field of doctorate and primary work activity: 1995

Page 1 of 1

Field of doctorate	Total	Research & development					Teaching	Management, sales, and administration	Computer applications	Professional sevices	Other Activities
		Total	Applied research	Basic research	Development	Design					
Total	484,780	198,890	97,780	66,190	23,590	11,340	106,970	79,380	21,120	59,810	18,620
Sciences	406,130	159,880	78,280	62,300	14,200	5,100	94,290	63,560	14,590	57,760	16,050
Computer and mathematical sciences	29,250	8,740	3,800	3,560	610	790	11,910	3,270	4,110	540	680
Computer and information sciences	6,440	2,320	1,150	730	200	240	1,820	660	1,540	S	80
Mathematical sciences	22,820	6,420	2,650	2,820	400	540	10,090	2,610	2,570	520	600
Life and related sciences	132,190	67,300	29,710	32,780	4,060	750	23,800	20,690	2,050	12,720	5,640
Agricultural and food sciences	15,440	8,230	5,830	1,430	870	90	1,940	3,020	390	770	1,100
Biological and health sciences	112,870	57,410	22,660	31,110	3,040	600	21,080	16,840	1,550	11,700	4,290
Environmental sciences	3,890	1,660	1,220	230	160	60	780	830	100	250	250
Physical and related sciences	101,300	52,520	25,610	16,580	7,750	2,590	17,130	17,850	5,850	3,920	4,030
Chemistry, except biochemistry	52,540	27,300	14,390	6,830	5,150	940	8,390	10,380	1,700	2,480	2,290
Geology and oceanography	13,090	6,640	3,690	2,580	310	60	2,890	1,830	590	470	690
Physics and astronomy	34,410	17,920	7,060	7,030	2,280	1,560	5,630	5,500	3,530	840	980
Other physical sciences (incl. earth)	1,260	660	470	140	S	S	220	150	S	130	70
Social and related sciences	143,390	31,310	19,160	9,390	1,780	980	41,450	21,750	2,590	40,580	5,700
Economics	19,860	6,810	4,840	1,460	340	170	7,550	3,170	280	1,150	900
Political and related sciences	14,790	3,010	1,820	790	240	160	6,780	2,890	310	830	970
Psychology	75,810	12,420	6,980	4,260	720	460	12,990	10,350	1,100	36,520	2,440
Sociology and anthropology	20,530	5,630	3,330	2,000	210	90	9,180	3,290	440	1,170	820
Other social sciences	12,410	3,440	2,200	870	260	110	4,960	2,050	470	920	570
Engineering	78,650	39,010	19,500	3,890	9,390	6,240	12,680	15,810	6,530	2,050	2,570
Aerospace/aeronautical	3,350	1,690	1,030	180	260	200	590	690	260	S	100
Chemical	10,930	5,990	2,790	590	1,700	910	980	2,640	650	200	480
Civil	7,400	3,070	1,490	220	390	970	1,720	1,450	530	410	230
Electrical/computer	20,780	9,920	4,650	860	2,920	1,500	3,080	4,430	2,500	260	590
Industrial	2,240	580	360	S	S	130	940	440	220	S	S
Mechanical	9,710	5,100	2,410	520	1,320	850	1,750	1,640	720	220	280
Other engineering	24,230	12,660	6,770	1,480	2,730	1,690	3,630	4,520	1,660	890	870

KEY: S = Suppressed because fewer than 50 weighted cases reported (See NOTE below)

NOTE: All numbers in the table are estimates derived from a sample.
Percentage distributions are provided in Table 36.

SOURCE: National Science Foundation/SRS, 1995 Survey of Doctorate Recipients

Table 23. Employed doctoral scientists and engineers, by occupation and primary work activity: 1995

Page 1 of 2

Occupation	Total	Research & development					Teaching	Management, sales, and administration	Computer applications	Professional sevices	Other Activities
		Total	Applied research	Basic research	Development	Design					
Total	484,780	198,890	97,780	66,190	23,590	11,340	106,970	79,380	21,120	59,810	18,620
Scientists	284,840	135,410	64,460	58,810	8,760	3,370	78,840	11,980	11,740	39,630	7,270
Computer and mathematical scientists	37,440	12,320	5,850	3,860	1,080	1,530	13,410	1,330	9,000	580	820
Computer and information scientists	14,170	4,830	2,300	570	790	1,180	S	890	7,680	240	490
Mathematical scientists	6,050	4,020	2,800	570	290	350	S	280	1,200	280	220
Postsecondary teachers, computer and mathematical sciences	17,230	3,470	750	2,720	S	S	13,330	150	130	50	110
Life and related scientists	85,990	60,910	24,580	33,700	2,280	350	16,320	3,440	670	2,650	2,000
Agricultural scientists	7,730	6,170	4,820	740	600	S	80	600	80	480	320
Biological scientists	47,650	41,990	16,510	23,580	1,610	300	190	2,070	510	1,490	1,400
Forestry and conservation scientists	850	650	480	120	S	S	S	70	S	S	80
Postsecondary teachers, life and related sciences	29,760	12,110	2,770	9,260	70	S	16,040	700	S	660	210
Physical and related scientists	65,900	41,390	21,160	14,230	4,760	1,250	16,140	3,390	1,740	1,120	2,110
Chemists, except biochemists	21,270	18,020	11,150	2,880	3,480	510	110	1,680	230	350	880
Earth scientists	8,590	6,690	4,220	2,170	230	70	50	580	480	290	490
Physicists and astronomers	12,080	10,010	4,480	4,110	810	610	60	610	830	330	240
Other physical scientists	1,760	1,190	590	320	230	60	S	150	70	90	270
Postsecondary teachers, physical and related sciences	22,190	5,470	710	4,740	S	S	15,930	380	120	60	240
Social and related scientists	95,510	20,790	12,870	7,030	640	240	32,970	3,800	320	35,290	2,340
Economists	5,800	3,990	3,410	370	140	70	S	470	160	600	550
Political scientists	1,110	690	480	150	60	S	S	90	S	110	160
Psychologists	41,010	4,300	2,970	950	270	110	260	1,820	60	33,680	890
Sociologists and anthropologists	2,600	2,080	1,420	660	S	S	S	140	S	160	170
S&T historians and other social scientists	2,130	1,620	1,350	170	70	S	S	160	S	70	210
Postsecondary teachers, social and related sciences	42,870	8,120	3,250	4,740	100	S	32,600	1,120	S	660	360

See explanatory information and SOURCE at end of table.

Table 23. Employed doctoral scientists and engineers, by occupation and primary work activity: 1995

Page 2 of 2

Occupation	Total	Research & development					Teaching	Management, sales, and administration	Computer applications	Professional sevices	Other Activities
		Total	Applied research	Basic research	Development	Design					
Engineers	58,430	36,550	18,280	3,170	8,830	6,280	10,920	3,990	3,730	1,410	1,830
Aerospace and related engineers	3,630	2,570	1,440	190	600	340	S	290	620	S	130
Chemical engineers	5,640	4,800	2,320	240	1,410	830	S	370	270	S	170
Civil and architectural engineers	2,790	1,860	640	80	240	890	S	340	220	260	100
Electric and related engineers	10,660	8,260	3,490	250	2,890	1,630	S	820	1,160	90	300
Industrial engineers	840	490	260	S	80	110	S	200	70	S	S
Mechanical engineers	5,770	4,660	2,250	250	1,240	920	S	300	560	120	120
Other engineers	13,590	9,830	5,290	660	2,330	1,550	S	1,290	800	810	850
Postsecondary teachers, engineering	15,530	4,080	2,590	1,450	S	S	10,860	380	S	S	140
Non-S&E occupations	141,520	26,930	15,040	4,200	5,990	1,690	17,210	63,430	5,660	18,780	9,510
Managers, administrators, etc.	83,820	16,340	8,700	1,770	4,570	1,300	1,720	55,870	1,750	3,810	4,340
Health and related occupations	13,450	2,480	1,640	610	160	80	160	880	220	9,280	420
Teachers, except S&E postsecondary teachers	18,920	3,220	2,080	1,090	S	S	14,340	670	60	420	210
Social services and related occupations	1,770	80	S	S	S	S	200	190	S	1,030	270
Technologists, etc.	5,340	1,750	840	270	480	160	S	410	2,860	80	240
Sales and marketing occupations	4,870	500	340	S	80	60	S	3,720	170	180	260
Other non-S&E occupations	13,360	2,570	1,390	450	630	100	750	1,690	600	3,970	3,770

KEY: S = Suppressed because fewer than 50 weighted cases reported (See NOTE below)

NOTE: All numbers in the table are estimates derived from a sample.

SOURCE: National Science Foundation/SRS, 1995 Survey of Doctorate Recipients

Table 24. Employed doctoral scientists and engineers, by geographic location and broad field of doctorate: 1995

Page 1 of 2

Geographic location	Total	Sciences	Computer and mathematical sciences	Life and related sciences	Physical and related sciences	Social and related sciences	Engineering
Total	484,780	406,130	29,250	132,190	101,300	143,390	78,650
	[Percentage distribution]						
New England	7.9	8.0	7.6	7.7	8.2	8.1	7.4
Connecticut	1.6	1.7	1.1	1.7	1.9	1.7	1.4
Maine	0.4	0.5	0.3	0.4	0.4	0.6	0.3
Massachusetts	4.6	4.7	4.8	4.6	5.0	4.5	4.3
New Hampshire	0.4	0.4	0.6	0.2	0.5	0.4	0.5
Rhode Island	0.5	0.5	0.6	0.4	0.3	0.6	0.6
Vermont	0.3	0.3	S	0.4	0.1	0.4	0.4
Middle Atlantic	16.8	17.1	16.9	15.1	17.7	18.5	15.5
New Jersey	4.0	3.9	4.7	3.1	5.9	3.0	4.7
New York	8.0	8.4	8.3	7.2	6.9	10.6	6.4
Pennsylvania	4.8	4.8	3.9	4.8	4.9	5.0	4.4
East North Central	13.9	13.7	13.5	13.7	13.4	13.8	14.9
Illinois	4.2	4.3	4.9	4.3	4.0	4.3	3.7
Indiana	1.6	1.6	1.4	1.7	1.3	1.8	1.7
Michigan	3.0	2.7	2.4	2.9	2.7	2.6	4.0
Ohio	3.6	3.5	3.6	3.0	4.1	3.5	4.4
Wisconsin	1.5	1.6	1.1	1.8	1.2	1.7	1.1
West North Central	6.1	6.4	5.7	7.6	4.9	6.4	4.7
Iowa	0.9	0.9	1.0	1.0	0.7	0.9	0.7
Kansas	0.7	0.7	0.8	1.0	0.3	0.8	0.5
Minnesota	1.8	1.8	1.1	1.9	1.9	1.8	1.5
Missouri	1.7	1.8	2.3	2.2	1.5	1.6	1.4
North Dakota	0.3	0.3	S	0.5	0.1	0.3	0.2
Nebraska	0.5	0.6	0.3	0.8	0.3	0.6	0.3
South Dakota	0.2	0.2	S	0.3	0.1	0.3	0.1
South Atlantic	18.9	19.4	19.5	19.8	17.6	20.4	15.9
Delaware	0.7	0.6	0.2	0.7	1.1	0.4	0.8
Dist of Columbia	2.8	3.0	2.4	1.7	2.0	5.1	1.3
Florida	2.6	2.6	1.6	2.4	2.0	3.3	2.9
Georgia	2.0	2.1	1.8	2.3	1.6	2.2	1.4
Maryland	4.0	4.2	4.3	5.5	3.8	3.2	3.1
North Carolina	2.6	2.8	3.4	3.6	2.3	2.2	1.9
South Carolina	0.9	0.9	0.8	1.0	0.9	0.7	0.8
Virginia	3.0	2.9	4.7	2.1	3.4	3.1	3.2
West Virginia	0.4	0.4	S	0.4	0.5	0.3	0.5
East South Central	4.1	4.1	5.1	4.4	3.7	3.9	4.2
Alabama	1.1	1.0	1.6	1.3	0.8	0.8	1.5
Kentucky	0.8	0.8	1.6	0.8	0.6	0.9	0.5
Mississippi	0.6	0.6	S	0.8	0.5	0.5	0.6
Tennessee	1.6	1.7	1.8	1.5	1.8	1.8	1.5

See explanatory information and SOURCE at end of table.

Table 24. Employed doctoral scientists and engineers, by geographic location and broad field of doctorate: 1995

Page 2 of 2

Geographic location	Total	Sciences	Computer and mathematical sciences	Life and related sciences	Physical and related sciences	Social and related sciences	Engineering
	[Percentage distribution]						
West South Central	8.0	7.8	8.1	8.6	8.4	6.5	9.3
Arkansas	0.4	0.5	0.3	0.5	0.4	0.5	0.3
Louisiana	1.0	1.1	0.8	1.3	1.1	0.9	0.9
Oklahoma	0.9	0.8	0.7	1.0	0.7	0.9	1.0
Texas	5.7	5.4	6.3	5.7	6.2	4.3	7.1
Mountain	6.5	6.2	6.4	5.8	7.9	5.4	8.2
Arizona	1.2	1.1	1.1	1.0	1.0	1.2	1.8
Colorado	2.0	1.9	1.9	1.8	2.6	1.5	2.2
Idaho	0.4	0.3	0.4	0.5	0.2	0.3	0.4
Montana	0.3	0.4	0.4	0.5	0.2	0.4	0.1
New Mexico	1.3	1.1	1.5	0.7	2.3	0.6	2.2
Nevada	0.3	0.3	0.4	0.2	0.4	0.3	0.3
Utah	0.9	0.9	0.7	0.9	0.9	0.8	1.0
Wyoming	0.1	0.1	S	0.1	0.2	0.2	0.1
Pacific	17.5	17.1	17.1	17.0	18.0	16.7	19.6
Alaska	0.2	0.3	S	0.2	0.3	0.3	0.2
California	13.1	12.6	13.6	11.6	14.4	12.2	15.8
Hawaii	0.5	0.5	0.3	0.6	0.4	0.6	0.2
Oregon	1.1	1.1	1.0	1.6	0.7	1.1	1.0
Washington	2.3	2.4	1.9	2.8	2.2	2.2	2.2
U.S. possessions	0.5	0.5	0.4	0.6	0.5	0.5	0.5

KEY: S = Suppressed because fewer than 50 weighted cases reported (See NOTE below)

NOTE: All numbers in the table are estimates derived from a sample.

SOURCE: National Science Foundation/SRS, 1995 Survey of Doctorate Recipients

Table 25. Employed doctoral scientists and engineers, by geographic location and broad occupation: 1995

Page 1 of 2

Geographic location	Total	Scientists	Computer and mathematical scientists	Life and related scientists	Physical and related scientists	Social and related scientists	Engineers	Non-S&E occupations
Total	484,780	284,840	37,440	85,990	65,900	95,510	58,430	141,520
	[Percentage distribution]							
New England	7.9	8.1	7.4	8.6	7.4	8.5	7.0	7.8
Connecticut	1.6	1.7	0.9	1.8	1.6	1.9	1.2	1.7
Maine	0.4	0.5	0.3	0.5	0.4	0.6	0.2	0.4
Massachusetts	4.6	4.7	5.0	5.2	4.5	4.4	4.2	4.6
New Hampshire	0.4	0.4	0.7	0.3	0.5	0.5	0.4	0.4
Rhode Island	0.5	0.5	0.4	0.4	0.3	0.7	0.5	0.4
Vermont	0.3	0.3	0.1	0.3	0.1	0.4	0.6	0.3
Middle Atlantic	16.8	17.2	18.3	15.0	17.1	18.7	14.8	16.9
New Jersey	4.0	3.8	5.7	2.9	4.8	3.1	4.9	4.1
New York	8.0	8.3	8.5	7.2	6.8	10.4	5.6	8.5
Pennsylvania	4.8	5.1	4.1	5.0	5.6	5.2	4.4	4.3
East North Central	13.9	13.8	12.4	13.2	14.3	14.5	16.3	13.1
Illinois	4.2	4.2	4.6	3.9	4.3	4.2	4.0	4.2
Indiana	1.6	1.7	1.5	1.7	1.6	1.9	1.8	1.4
Michigan	3.0	2.9	2.8	2.8	2.9	3.0	4.6	2.4
Ohio	3.6	3.5	2.9	3.1	4.1	3.8	4.7	3.3
Wisconsin	1.5	1.4	0.6	1.7	1.4	1.5	1.2	1.7
West North Central	6.1	6.6	5.0	7.9	5.6	6.6	4.7	5.7
Iowa	0.9	1.0	0.9	1.1	1.0	0.9	0.7	0.7
Kansas	0.7	0.8	0.6	1.1	0.5	0.9	0.5	0.6
Minnesota	1.8	1.8	1.2	1.7	1.9	2.1	1.6	1.8
Missouri	1.7	1.8	1.6	2.3	1.5	1.5	1.4	1.8
North Dakota	0.3	0.3	S	0.5	0.2	0.3	0.2	0.2
Nebraska	0.5	0.6	0.3	0.9	0.4	0.6	0.3	0.4
South Dakota	0.2	0.2	0.2	0.3	0.1	0.3	S	0.2
South Atlantic	18.9	18.7	19.3	19.1	17.7	18.9	14.5	20.9
Delaware	0.7	0.6	0.5	0.7	1.1	0.2	0.8	0.7
Dist of Columbia	2.8	2.5	2.1	1.3	1.9	4.1	1.0	4.0
Florida	2.6	2.4	1.5	2.2	2.0	3.1	2.9	3.1
Georgia	2.0	2.2	2.3	2.2	1.7	2.4	1.5	1.7
Maryland	4.0	4.2	4.3	5.8	3.9	3.0	2.5	4.2
North Carolina	2.6	2.9	3.2	3.8	2.6	2.1	1.6	2.6
South Carolina	0.9	0.8	0.6	1.0	0.9	0.8	1.0	0.9
Virginia	3.0	2.8	4.7	1.8	2.8	2.9	2.8	3.5
West Virginia	0.4	0.5	0.3	0.4	0.7	0.4	0.5	0.3
East South Central	4.1	4.2	4.4	4.7	3.8	3.9	4.6	3.8
Alabama	1.1	1.0	1.3	1.2	0.8	0.7	1.8	1.1
Kentucky	0.8	0.8	1.3	0.8	0.6	0.8	0.4	0.8
Mississippi	0.6	0.6	0.2	0.9	0.6	0.4	0.5	0.6
Tennessee	1.6	1.8	1.6	1.8	2.0	1.9	1.8	1.2

See explanatory information and SOURCE at end of table.

Table 25. Employed doctoral scientists and engineers, by geographic location and broad occupation: 1995

Page 2 of 2

Geographic location	Total	Scientists	Computer and mathematical scientists	Life and related scientists	Physical and related scientists	Social and related scientists	Engineers	Non-S&E occupations
	[Percentage distribution]							
West South Central	8.0	8.0	8.6	8.8	8.2	6.8	9.6	7.5
Arkansas	0.4	0.5	0.2	0.6	0.4	0.5	0.3	0.4
Louisiana	1.0	1.1	1.1	1.3	1.2	0.8	1.1	0.9
Oklahoma	0.9	0.9	0.7	1.0	0.7	1.0	1.0	0.8
Texas	5.7	5.5	6.7	5.9	5.9	4.4	7.2	5.4
Mountain	6.5	6.3	6.2	5.3	9.0	5.4	8.5	6.1
Arizona	1.2	1.0	1.1	0.8	1.1	1.2	1.9	1.3
Colorado	2.0	2.1	1.9	1.9	3.0	1.6	2.3	1.7
Idaho	0.4	0.3	0.3	0.4	0.4	0.3	0.4	0.4
Montana	0.3	0.3	0.3	0.4	0.2	0.4	0.2	0.3
New Mexico	1.3	1.1	1.1	0.6	2.8	0.6	2.0	1.3
Nevada	0.3	0.4	0.3	0.2	0.5	0.4	0.4	0.2
Utah	0.9	0.9	1.0	0.9	0.8	0.8	1.1	0.9
Wyoming	0.1	0.2	S	0.1	0.2	0.2	0.2	0.1
Pacific	17.5	16.9	18.0	17.2	16.8	16.4	19.6	17.9
Alaska	0.2	0.3	S	0.2	0.3	0.3	0.2	0.3
California	13.1	12.5	13.8	11.5	13.2	12.4	15.7	13.3
Hawaii	0.5	0.5	S	0.7	0.5	0.5	0.3	0.5
Oregon	1.1	1.1	1.4	1.7	0.5	0.8	0.9	1.2
Washington	2.3	2.3	2.5	2.8	2.0	2.1	2.3	2.3
U.S. possessions	0.5	0.5	0.5	0.6	0.4	0.5	0.6	0.6

KEY: S = Suppressed because fewer than 50 weighted cases reported (See NOTE below)

NOTE: All numbers in the table are estimates derived from a sample.

SOURCE: National Science Foundation/SRS, 1995 Survey of Doctorate Recipients

Table 26. Employed doctoral scientists and engineers, by field of doctorate, race ethnicity, and sex: 1995

Page 1 of 2

Field of doctorate	Total			White			Black		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total	484,780	379,480	105,300	402,600	314,190	88,410	10,500	6,980	3,530
Sciences	406,130	304,880	101,250	348,280	262,570	85,710	9,400	5,950	3,450
Computer and mathematical sciences	29,250	25,560	3,700	22,960	20,170	2,790	430	350	80
Computer and information sciences	6,440	5,430	1,000	4,330	3,590	740	80	S	S
Mathematical sciences	22,820	20,120	2,690	18,640	16,580	2,060	350	300	50
Life and related sciences	132,190	95,740	36,460	113,580	83,020	30,560	2,710	1,690	1,020
Agricultural and food sciences	15,440	13,260	2,180	12,980	11,270	1,720	240	220	S
Biological and health sciences	112,870	78,920	33,960	97,080	68,520	28,570	2,430	1,430	1,000
Environmental sciences	3,890	3,560	330	3,510	3,240	270	S	S	S
Physical and related sciences	101,300	90,300	11,000	84,350	76,140	8,210	1,220	1,120	100
Chemistry, except biochemistry	52,540	45,240	7,300	43,020	37,660	5,360	870	790	80
Geology and oceanography	13,090	11,570	1,520	11,920	10,570	1,350	S	S	S
Physics and astronomy	34,410	32,480	1,930	28,320	27,060	1,260	300	290	S
Other physical sciences (incl. earth)	1,260	1,000	260	1,090	850	240	S	S	S
Social and related sciences	143,390	93,300	50,090	127,390	83,250	44,150	5,040	2,790	2,250
Economics	19,860	17,110	2,740	16,910	14,690	2,220	460	380	80
Political and related sciences	14,790	11,800	2,990	12,660	10,100	2,560	770	550	220
Psychology	75,810	43,680	32,120	69,380	40,530	28,850	2,470	1,080	1,400
Sociology and anthropology	20,530	12,660	7,880	18,250	11,310	6,940	870	530	340
Other social sciences	12,410	8,050	4,360	10,200	6,620	3,580	470	260	210
Engineering	78,650	74,600	4,050	54,330	51,620	2,710	1,100	1,020	80
Aerospace/aeronautical	3,350	3,320	S	2,550	2,530	S	70	70	S
Chemical	10,930	10,360	580	7,590	7,210	380	150	110	S
Civil	7,400	7,070	330	4,920	4,660	260	130	120	S
Electrical/computer	20,780	19,910	870	14,090	13,600	480	280	270	S
Industrial	2,240	1,940	310	1,600	1,340	270	S	S	S
Mechanical	9,710	9,420	290	6,380	6,250	130	140	140	S
Other engineering	24,230	22,590	1,640	17,210	16,040	1,170	300	290	S

See explanatory information and SOURCE at end of table.

Table 26. Employed doctoral scientists and engineers, by field of doctorate, race ethnicity, and sex: 1995

Page 2 of 2

Field of doctorate	Asian or Pacific Islander			Hispanic			Native American		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total	58,660	48,630	10,030	11,110	8,270	2,840	1,820	1,360	470
Sciences	37,360	28,460	8,900	9,360	6,640	2,730	1,660	1,200	450
Computer and mathematical sciences	4,930	4,240	690	870	740	130	S	S	S
Computer and information sciences	1,840	1,630	210	190	160	S	S	S	S
Mathematical sciences	3,090	2,610	480	680	580	100	S	S	S
Life and related sciences	12,880	8,980	3,900	2,580	1,780	800	450	270	180
Agricultural and food sciences	1,830	1,470	360	380	300	80	S	S	S
Biological and health sciences	10,810	7,310	3,500	2,160	1,450	710	380	210	170
Environmental sciences	240	200	S	S	S	S	50	S	S
Physical and related sciences	13,370	10,970	2,400	2,080	1,800	280	250	240	S
Chemistry, except biochemistry	7,220	5,570	1,650	1,270	1,080	200	160	150	S
Geology and oceanography	870	730	140	240	220	S	S	S	S
Physics and astronomy	5,160	4,560	610	560	510	50	S	S	S
Other physical sciences (incl. earth)	120	110	S	S	S	S	S	S	S
Social and related sciences	6,170	4,270	1,910	3,840	2,320	1,520	910	650	260
Economics	2,050	1,660	400	370	320	S	80	80	S
Political and related sciences	760	660	110	480	370	100	110	110	S
Psychology	1,450	750	700	2,030	1,080	960	460	250	210
Sociology and anthropology	660	380	280	600	310	290	140	110	S
Other social sciences	1,250	820	430	360	240	120	130	100	S
Engineering	21,310	20,180	1,130	1,740	1,630	120	170	150	S
Aerospace/aeronautical	660	650	S	80	80	S	S	S	S
Chemical	2,910	2,770	150	280	270	S	S	S	S
Civil	2,140	2,070	70	210	200	S	S	S	S
Electrical/computer	5,850	5,490	350	500	490	S	60	60	S
Industrial	550	520	S	S	S	S	S	S	S
Mechanical	3,010	2,890	120	160	140	S	S	S	S
Other engineering	6,190	5,780	410	470	420	S	60	60	S

KEY: S = Suppressed because fewer than 50 weighted cases reported (See NOTE below)

NOTE: All numbers in the table are estimates derived from a sample.

SOURCE: National Science Foundation/SRS, 1995 Survey of Doctorate Recipients

Table 27. Employed doctoral scientists and engineers, by occupation, race ethnicity, and sex: 1995

Page 1 of 2

Occupation	Total			White			Black		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total	484,780	379,480	105,300	402,600	314,190	88,410	10,500	6,980	3,530
Scientists	284,840	215,150	69,690	241,170	182,770	58,400	5,920	3,890	2,030
Computer and mathematical scientists	37,440	32,690	4,750	28,430	25,000	3,430	550	460	90
Computer and information scientists	14,170	12,730	1,430	10,200	9,250	960	100	80	S
Mathematical scientists	6,050	4,970	1,080	4,530	3,700	830	120	90	S
Postsecondary teachers, computer and mathematical sciences	17,230	14,990	2,240	13,700	12,060	1,640	330	280	S
Life and related scientists	85,990	64,010	21,980	72,580	54,880	17,710	1,410	950	450
Agricultural scientists	7,730	6,720	1,020	6,690	5,880	820	90	70	S
Biological scientists	47,650	33,470	14,170	38,260	27,330	10,930	610	410	200
Forestry and conservation scientists	850	720	130	810	700	110	S	S	S
Postsecondary teachers, life and related sciences	29,760	23,090	6,670	26,820	20,980	5,850	680	450	230
Physical and related scientists	65,900	58,160	7,730	55,000	49,040	5,960	930	870	70
Chemists, except biochemists	21,270	18,350	2,920	16,530	14,450	2,080	420	400	S
Earth scientists	8,590	7,660	930	7,700	6,840	860	S	S	S
Physicists and astronomers	12,080	11,290	790	10,030	9,520	510	60	60	S
Other physical scientists	1,760	1,500	260	1,470	1,310	160	S	S	S
Postsecondary teachers, physical and related sciences	22,190	19,350	2,840	19,260	16,910	2,350	410	370	S
Social and related scientists	95,510	60,290	35,220	85,160	53,850	31,300	3,030	1,620	1,420
Economists	5,800	4,510	1,290	4,680	3,710	970	100	70	S
Political scientists	1,110	870	240	880	650	220	S	S	S
Psychologists	41,010	21,850	19,160	37,800	20,400	17,400	1,170	450	720
Sociologists and anthropologists	2,600	1,550	1,040	2,460	1,520	950	60	S	S
S&T historians and other social scientists	2,130	1,180	950	1,830	1,040	790	50	S	S
Postsecondary teachers, social and related sciences	42,870	30,320	12,550	37,510	26,540	10,970	1,620	1,020	600
Engineers	58,430	55,120	3,300	40,250	38,040	2,220	810	710	100
Aerospace and related engineers	3,630	3,500	130	2,640	2,540	100	S	S	S
Chemical engineers	5,640	5,240	400	3,750	3,520	230	100	70	S
Civil and architectural engineers	2,790	2,680	110	1,530	1,470	70	S	S	S
Electric and related engineers	10,660	10,260	400	6,970	6,820	150	100	90	S
Industrial engineers	840	740	100	580	520	60	S	S	S
Mechanical engineers	5,770	5,590	180	3,410	3,340	70	50	50	S
Other engineers	13,590	12,560	1,030	9,680	8,900	780	140	140	S
Postsecondary teachers, engineering	15,530	14,560	970	11,700	10,930	770	340	300	S
Non-S&E occupations	141,520	109,210	32,300	121,180	93,390	27,800	3,770	2,370	1,400
Managers, administrators, etc.	83,820	69,420	14,400	72,190	59,740	12,450	2,180	1,540	640
Health and related occupations	13,450	9,580	3,870	11,230	7,980	3,260	300	150	150
Teachers, except S&E postsecondary teachers	18,920	10,560	8,360	16,310	9,170	7,140	790	320	470
Social services and related occupations	1,770	1,210	560	1,540	1,050	490	80	50	S
Technologists, etc.	5,340	4,690	650	4,070	3,560	510	50	50	S
Sales and marketing occupations	4,870	4,120	740	4,070	3,460	610	60	S	S
Other non-S&E occupations	13,360	9,630	3,730	11,780	8,440	3,340	310	220	100

See explanatory information and SOURCE at end of table.

Table 27. Employed doctoral scientists and engineers, by occupation, race/ethnicity, and sex: 1995

Page 2 of 2

Occupation	Asian or Pacific Islander			Hispanic			Native American		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total	58,660	48,630	1,030	11,110	8,270	2,840	1,820	1,360	470
Scientists	29,590	22,610	6,980	6,920	4,920	1,990	1,190	910	270
Computer and mathematical scientists	7,320	6,230	1,090	1,030	880	150	110	110	S
Computer and information scientists	3,500	3,070	430	320	290	S	S	S	S
Mathematical scientists	1,230	1,060	180	160	110	S	S	S	S
Postsecondary teachers, computer and mathematical sciences	2,580	2,110	480	560	480	70	60	60	S
Life and related scientists	9,990	6,770	3,210	1,780	1,220	550	230	180	60
Agricultural scientists	710	590	120	240	180	60	S	S	S
Biological scientists	7,570	4,910	2,660	1,020	690	330	190	130	60
Forestry and conservation scientists	S	S	S	S	S	S	S	S	S
Postsecondary teachers, life and related sciences	1,700	1,270	430	510	350	160	S	S	S
Physical and related scientists	8,310	6,850	1,460	1,490	1,250	240	160	150	S
Chemists, except biochemists	3,760	2,980	780	510	460	S	S	S	S
Earth scientists	680	630	50	150	130	S	S	S	S
Physicists and astronomers	1,800	1,550	260	180	170	S	S	S	S
Other physical scientists	240	170	70	S	S	S	S	S	S
Postsecondary teachers, physical and related sciences	1,830	1,520	310	610	470	140	80	80	S
Social and related scientists	3,970	2,750	1,220	2,620	1,560	1,060	690	470	210
Economists	800	550	260	150	120	S	60	60	S
Political scientists	100	80	S	100	100	S	S	S	S
Psychologists	710	280	420	1,020	570	450	300	150	150
Sociologists and anthropologists	S	S	S	S	S	S	S	S	S
S&T historians and other social scientists	180	110	70	60	S	60	S	S	S
Postsecondary teachers, social and related sciences	2,150	1,720	430	1,250	760	490	320	260	50
Engineers	15,810	14,950	860	1,390	1,270	120	150	140	S
Aerospace and related engineers	880	850	S	60	60	S	S	S	S
Chemical engineers	1,640	1,510	130	150	140	S	S	S	S
Civil and architectural engineers	1,110	1,080	S	100	100	S	S	S	S
Electric and related engineers	3,330	3,130	200	210	180	S	S	S	S
Industrial engineers	230	210	S	S	S	S	S	S	S
Mechanical engineers	2,160	2,070	100	110	110	S	S	S	S
Other engineers	3,500	3,250	250	260	260	S	S	S	S
Postsecondary teachers, engineering	2,950	2,860	90	470	410	50	70	60	S
Non-S&E occupations	13,270	11,070	2,200	2,810	2,080	730	490	310	180
Managers, administrators, etc	7,590	6,650	950	1,640	1,340	300	220	150	60
Health and related occupations	1,660	1,290	370	220	140	80	S	S	S
Teachers, except S&E postsecondary teachers	1,320	870	450	390	150	230	110	S	60
Social services and related occupations	90	80	S	S	S	S	S	S	S
Technologists, etc	1,120	1,010	110	80	60	S	S	S	S
Sales and marketing occupations	570	510	60	160	110	50	S	S	S
Other non-S&E occupations	910	670	240	280	250	S	80	70	S

KEY: S = Suppressed because fewer than 50 weighted cases reported (See NOTE below)

NOTE: All numbers in the table are estimates derived from a sample.

SOURCE: National Science Foundation/SRS, 1995 Survey of Doctorate Recipients

Table 28. Employed doctoral scientists and engineers, by demographic characteristics and broad field of doctorate: 1995

Page 1 of 1

Characteristics	Total	Sciences	Computer and mathematical sciences	Life and related sciences	Physical and related sciences	Social and related sciences	Engineering
Total	484,780	406,130	29,250	132,190	101,300	143,390	78,650
	[Percentage distribution]						
Sex:							
Male	78.3	75.1	87.4	72.4	89.1	65.1	94.9
Female	21.7	24.9	12.6	27.6	10.9	34.9	5.1
Race/Ethnicity:							
White	83.0	85.8	78.5	85.9	83.3	88.8	69.1
Black	2.2	2.3	1.5	2.0	1.2	3.5	1.4
Asian or Pacific Islander	12.1	9.2	16.9	9.7	13.2	4.3	27.1
Hispanic	2.3	2.3	3.0	2.0	2.1	2.7	2.2
Native American	0.4	0.4	S	0.3	0.3	0.6	0.2
Age:							
Under 30	1.7	1.6	2.6	1.5	2.2	0.9	2.6
30 to 34	10.6	9.6	11.8	10.1	12.4	6.9	15.6
35 to 39	15.9	15.3	16.8	16.8	15.8	13.1	19.1
40 to 44	17.5	17.8	15.6	20.0	14.3	18.8	15.4
45 to 49	18.4	19.3	18.8	18.7	15.8	22.3	13.9
50 to 54	16.9	17.1	18.5	15.5	17.7	18.0	15.5
55 to 59	9.8	9.7	10.2	9.0	11.1	9.4	10.5
60 to 64	5.4	5.6	3.8	5.1	6.3	6.0	4.5
65 to 75	3.8	4.0	1.8	3.4	4.5	4.6	2.8
Citizenship status:							
U.S. total	91.6	93.2	84.9	93.5	91.7	95.6	83.3
U.S. native	80.7	84.5	73.1	84.9	80.4	89.5	61.0
U.S. naturalized	10.8	8.6	11.7	8.6	11.3	6.1	22.4
Non-U.S. total	8.4	6.8	15.1	6.5	8.3	4.4	16.7
Non-U.S., permanent resident	7.0	5.7	12.3	5.3	7.0	3.7	14.0
Non-U.S., temporary resident	1.4	1.2	2.8	1.2	1.4	0.6	2.6
Non-U.S., unspecified	S	S	S	S	S	S	0.1
Year of doctorate:							
1993-94 graduates	8.6	8.3	9.9	9.2	7.2	7.9	10.2
1990-92 graduates	12.1	11.6	13.8	12.3	10.5	11.1	14.7
1985-89 graduates	17.6	16.9	16.8	17.7	15.5	17.3	21.3
1980-84 graduates	15.6	16.3	12.9	17.2	13.3	18.4	11.6
1970-79 graduates	30.0	30.7	30.4	29.1	30.6	32.2	26.4
1960-69 graduates	13.3	13.3	14.9	11.9	18.4	10.6	13.6
Pre-1960 graduates	2.8	2.9	1.2	2.5	4.6	2.4	2.2
Place of birth:							
U.S.	79.9	83.8	72.4	84.2	79.6	88.7	60.0
Europe	3.5	3.4	4.9	2.7	4.0	3.4	4.0
Asia	13.0	9.6	18.6	9.8	13.5	4.7	31.0
North America	0.9	0.9	0.9	0.9	0.9	0.9	0.7
Central America	0.3	0.3	0.5	0.3	0.3	0.2	0.4
Carribean	0.4	0.4	0.3	0.3	0.3	0.5	0.4
South America	0.7	0.6	1.0	0.6	0.6	0.6	1.0
Africa	1.1	0.8	1.0	1.0	0.6	0.8	2.3
Oceania	0.1	0.1	0.4	0.1	S	0.1	0.2
Unknown	0.1	0.1	S	0.1	0.1	0.1	0.2

KEY: S = Suppressed because fewer than 50 weighted cases reported (See NOTE below)

NOTE: All numbers in the table are estimates derived from a sample.

SOURCE: National Science Foundation/SRS, 1995 Survey of Doctorate Recipients

Table 29. Employed doctoral scientists and engineers, by demographic characteristics and broad occupation: 1995

Page 1 of 1

Characteristics	Total	Scientists	Computer and mathematical scientists	Life and related scientists	Physical and related scientists	Social and related scientists	Engineers	Non-S&E occupations
Total	484,780	284,840	37,440	85,990	65,900	95,510	58,430	141,520
	[Percentage distribution]							
Sex:								
Male	78.3	75.5	87.3	74.4	88.3	63.1	94.3	77.2
Female	21.7	24.5	12.7	25.6	11.7	36.9	5.7	22.8
Race/Ethnicity:								
White	83.0	84.7	75.9	84.4	83.5	89.2	68.9	85.6
Black	2.2	2.1	1.5	1.6	1.4	3.2	1.4	2.7
Asian or Pacific Islander	12.1	10.4	19.5	11.6	12.6	4.2	27.1	9.4
Hispanic	2.3	2.4	2.7	2.1	2.3	2.7	2.4	2.0
Native American	0.4	0.4	0.3	0.3	0.2	0.7	0.3	0.3
Age:								
Under 30	1.7	2.1	2.6	2.1	2.8	1.3	2.8	0.6
30 to 34	10.6	12.2	12.6	13.8	15.3	8.5	17.0	4.8
35 to 39	15.9	17.6	17.5	19.6	18.3	15.3	20.8	10.5
40 to 44	17.5	18.0	17.6	19.9	15.0	18.6	15.3	17.2
45 to 49	18.4	17.5	18.1	16.0	13.8	21.2	13.5	22.1
50 to 54	16.9	14.8	16.7	13.2	14.3	15.9	12.7	22.8
55 to 59	9.8	8.7	8.9	7.4	10.6	8.6	10.0	12.0
60 to 64	5.4	5.1	3.9	4.6	5.8	5.6	4.6	6.4
65 to 75	3.8	3.9	2.0	3.4	4.1	5.0	3.3	3.7
Citizenship status:								
U.S. total	91.6	91.3	83.3	91.2	90.5	95.2	82.6	95.8
U.S. native	80.7	82.7	69.5	82.7	80.2	89.5	62.0	84.5
U.S. naturalized	10.8	8.7	13.8	8.5	10.3	5.6	20.6	11.2
Non-U.S. total	8.4	8.7	16.7	8.8	9.5	4.8	17.4	4.2
Non-U.S., permanent resident	7.0	7.0	13.4	6.8	7.8	4.1	15.0	3.8
Non-U.S., temporary resident	1.4	1.7	3.3	1.9	1.8	0.7	2.4	0.5
Non-U.S., unspecified	S	S	S	S	S	S	S	S
Year of doctorate:								
1993-94 graduates	8.6	10.0	10.6	11.1	9.2	9.2	11.3	4.7
1990-92 graduates	12.1	13.5	14.4	14.3	13.0	12.8	15.4	7.8
1985-89 graduates	17.6	18.4	18.5	18.9	18.0	18.3	21.9	14.3
1980-84 graduates	15.6	15.7	14.4	16.1	13.9	17.1	12.0	16.7
1970-79 graduates	30.0	27.1	28.1	25.3	25.5	29.5	24.6	38.0
1960-69 graduates	13.3	12.5	12.6	11.5	16.5	10.5	12.1	15.6
Pre-1960 graduates	2.8	2.8	1.4	2.8	3.9	2.5	2.7	2.8
Place of birth:								
U.S.	79.9	81.8	68.5	81.9	79.4	88.7	61.0	83.9
Europe	3.5	3.6	5.2	3.2	3.8	3.3	3.8	3.2
Asia	13.0	11.0	21.7	11.6	13.3	4.7	30.4	9.9
North America	0.9	1.0	0.8	1.0	0.9	1.1	0.9	0.7
Central America	0.3	0.3	0.5	0.3	0.4	0.2	0.4	0.1
Carribean	0.4	0.4	0.3	0.2	0.5	0.4	0.3	0.4
South America	0.7	0.7	0.9	0.6	0.6	0.7	1.1	0.5
Africa	1.1	1.0	1.9	0.8	0.9	0.8	1.8	1.0
Oceania	0.1	0.1	0.2	0.1	S	0.2	0.2	0.1
Unknown	0.1	0.1	S	0.1	0.1	0.1	0.1	0.1

KEY: S = Suppressed because fewer than 50 weighted cases reported (See NOTE below)

NOTE: All numbers in the table are estimates derived from a sample.

SOURCE: National Science Foundation/SRS, 1995 Survey of Doctorate Recipients

Table 30. Employed doctoral scientists and engineers, by demographic characteristics and citizenship status: 1995

Page 1 of 1

Characteristic	Total	U.S. citizen			Non-U.S. citizen		
		Total	Native	Naturalized	Total	Permanent resident	Temporary resident
Total	484,780	443,900	391,310	52,590	40,880	33,990	6,790
	[Percentage distribution]						
Sex:							
Male	78.3	78.0	77.2	83.6	81.8	81.7	82.1
Female	21.7	22.0	22.8	16.4	18.2	18.3	17.9
Race/Ethnicity:							
White	83.0	88.0	94.7	37.8	29.4	29.4	28.5
Black	2.2	2.0	1.9	2.7	4.1	4.0	4.7
Asian or Pacific Islander	12.1	7.5	1.3	53.7	61.9	62.2	61.1
Hispanic	2.3	2.1	1.6	5.6	4.6	4.3	5.7
Native American	0.4	0.4	0.4	0.1	S	S	S
Age:							
Under 30	1.7	1.5	1.6	0.8	4.5	2.9	12.5
30 to 34	10.6	8.7	9.1	5.8	31.0	27.9	46.7
35 to 39	15.9	14.5	14.7	13.3	30.9	32.5	23.2
40 to 44	17.5	17.6	17.6	17.9	15.7	16.6	10.6
45 to 49	18.4	19.4	19.3	20.6	7.3	8.2	2.5
50 to 54	16.9	17.9	18.0	17.2	5.9	6.6	2.7
55 to 59	9.8	10.5	10.2	12.8	2.4	2.7	1.1
60 to 64	5.4	5.8	5.7	6.5	1.2	1.5	S
65 to 75	3.8	4.0	3.9	5.2	1.0	1.0	0.8
Geographic division:							
New England	7.9	7.8	7.8	8.1	8.5	8.1	10.5
Middle Atlantic	16.8	16.6	16.3	18.7	19.2	20.2	14.2
East North Central	13.9	13.6	13.7	12.6	16.7	17.1	14.8
West North Central	6.1	6.1	6.4	3.9	5.6	5.5	6.4
South Atlantic	18.9	19.2	19.4	17.6	15.5	14.7	19.8
East South Central	4.1	4.2	4.4	3.2	3.0	3.0	3.2
West South Central	8.0	8.0	8.0	7.6	8.3	8.6	7.1
Mountain	6.5	6.7	7.0	3.9	4.8	4.6	5.9
Pacific	17.5	17.5	16.7	23.7	17.5	17.9	15.3
Other U.S.	0.3	0.2	0.1	0.8	0.9	0.4	3.0
Place of birth:							
U.S.	79.9	87.2	98.8	0.5	1.2	1.1	1.6
Europe	3.5	2.6	0.3	19.5	13.5	13.3	15.0
Asia	13.0	7.9	0.4	63.9	68.4	69.2	64.7
North America	0.9	0.5	0.1	3.9	4.4	4.6	3.9
Central America	0.3	0.2	0.1	1.3	1.1	1.0	1.5
Carribean	0.4	0.3	S	2.6	1.0	1.1	S
South America	0.7	0.4	0.1	2.9	3.7	3.6	4.6
Africa	1.1	0.7	0.1	5.2	5.5	5.1	7.0
Oceania	0.1	S	S	0.4	1.1	1.1	1.2
Unknown	0.1	0.1	0.1	S	S	S	S

KEY: S = Suppressed because fewer than 50 weighted cases reported (See NOTE below)

NOTE: All numbers in the table are estimates derived from a sample.

SOURCE: National Science Foundation/SRS, 1995 Survey of Doctorate Recipients

Table 31. Employed doctoral scientists and engineers, by demographic characteristics and sector of employment: 1995

Page 1 of 2

Characteristics	Total	Universities and 4-year colleges	Other educational institutions	Private-for-profit	Self-employed	Private not-for-profit	Federal government	State and local government	Other sector
Total	484,780	222,530	12,410	146,720	28,550	23,840	34,650	13,330	2,750
	[Pecentage distribution]								
Sex:									
Male	78.3	76.6	61.4	85.6	65.4	71.2	81.6	72.4	78.4
Female	21.7	23.4	38.6	14.4	34.6	28.8	18.4	27.6	21.6
Race/Ethnicity:									
White	83.0	83.9	87.7	78.1	92.4	86.1	87.3	85.2	70.2
Black	2.2	2.6	4.3	1.4	1.4	1.9	2.1	3.6	S
Asian/Pacific Islander	12.1	10.5	4.6	18.4	4.1	9.0	7.9	9.1	21.6
Hispanic	2.3	2.6	2.8	1.9	1.4	2.7	2.2	1.4	5.4
Native American	0.4	0.4	0.6	0.2	0.6	0.2	0.4	0.7	S
Age:									
Under 30	1.7	2.0	0.8	1.8	0.3	1.6	1.5	0.6	S
30 to 34	10.6	11.5	5.0	12.6	3.0	11.4	7.4	4.1	6.7
35 to 39	15.9	16.7	8.8	17.3	10.4	17.2	12.4	12.6	14.4
40 to 44	17.5	16.4	17.2	18.4	15.8	19.9	17.5	24.3	14.2
45 to 49	18.4	16.3	24.9	18.7	24.2	17.9	21.7	23.0	24.9
50 to 54	16.9	16.4	20.4	16.1	19.0	15.3	21.2	16.6	13.4
55 to 59	9.8	10.4	11.8	8.6	10.3	8.2	11.3	8.9	15.1
60 to 64	5.4	6.4	6.7	4.0	6.3	4.1	4.8	6.0	4.5
65 to 75	3.8	3.9	4.4	2.4	10.5	4.4	2.2	3.9	6.0
Citizenship status:									
U.S. total	91.6	90.7	97.4	89.5	97.3	93.6	97.9	94.9	74.8
U.S. native	80.7	81.2	89.7	74.8	89.9	85.5	88.8	83.9	60.6
U.S. naturalized	10.8	9.4	7.7	14.7	7.4	8.1	9.1	11.0	14.2
Non-U.S. total	8.4	9.3	2.6	10.5	2.7	6.4	2.1	5.1	25.2
Non-U.S., permanent resident	7.0	7.6	2.4	9.1	2.5	5.3	1.8	4.8	11.8
Non-U.S., temporary resident	1.4	1.8	S	1.4	S	1.1	0.4	S	13.4
Non-U.S., unspecified	S	S	S	S	S	S	S	S	S
Geographic division:									
New England	7.9	8.9	5.7	7.7	8.3	9.8	3.2	4.8	S
Middle Atlantic	16.8	15.5	23.7	20.8	17.4	18.2	3.8	19.5	14.5
East North Central	13.9	16.2	11.3	13.7	10.2	13.5	5.8	10.5	2.5
West North Central	6.1	8.0	4.2	5.2	2.9	4.5	2.6	5.5	2.6
South Atlantic	18.9	15.3	20.0	15.2	15.0	20.2	57.2	17.4	53.9
East South Central	4.1	5.4	1.8	3.0	3.1	3.5	4.0	1.5	S
West South Central	8.0	8.7	8.2	8.4	7.6	4.7	5.2	7.7	3.3
Mountain	6.5	6.8	5.7	5.7	7.5	6.3	7.1	8.1	3.0
Pacific	17.5	14.9	19.3	20.2	27.7	19.1	11.1	24.9	9.2
Other U.S.	0.3	0.3	S	0.2	0.3	S	S	S	9.0

See explanatory information and SOURCE at end of table.

Table 31. Employed doctoral scientists and engineers, by demographic characteristics and sector of employment: 1995

Page 2 of 2

Characteristics	Total	Universities and 4-year colleges	Other educational institutions	Private-for-profit	Self-employed	Private not-for-profit	Federal government	State and local government	Other sector
	[Percentage distribution]								
Place of birth:									
U.S.	79.9	80.5	89.1	74.1	89.1	84.1	87.9	82.9	56.7
Europe	3.5	4.1	2.7	3.1	3.6	3.6	2.1	2.9	6.7
Asia	13.0	11.6	5.5	19.3	4.8	9.1	8.0	10.4	26.2
North America	0.9	1.0	S	0.9	1.0	0.8	0.4	1.1	S
Central America	0.3	0.4	S	0.2	0.2	S	S	S	S
Carribean	0.4	0.3	0.5	0.4	0.2	0.3	0.3	S	S
South America	0.7	0.7	0.9	0.7	0.3	0.8	0.4	S	3.5
Africa	1.1	1.2	0.6	1.1	0.6	0.8	0.5	1.7	2.5
Oceania	0.1	0.1	S	0.1	S	0.2	S	S	S
Unknown	0.1	0.1	S	0.1	S	S	S	S	S

KEY: S = Suppressed because fewer than 50 weighted cases reported (See NOTE below)

NOTE: All numbers in the table are estimates derived from a sample.

SOURCE: National Science Foundation/SRS, 1995 Survey of Doctorate Recipients

Table 32. Employed doctoral scientists and engineers, by demographic characteristics and primary work activity: 1995

Page 1 of 2

Characteristics	Total	Research and development					Teaching	Management, sales, and administration	Computer applications	Professional services	Other activities
		Total	Applied research	Basic research	Development	Design					
Total	484,780	198,890	97,780	66,190	23,590	11,340	106,970	79,380	21,120	59,810	18,620
	[Percentage distribution]										
Sex:											
Male	78.3	81.6	81.6	77.5	88.1	92.6	75.8	82.7	90.3	62.1	75.9
Female	21.7	18.4	18.4	22.5	11.9	7.4	24.2	17.3	9.7	37.9	24.1
Race/Ethnicity:											
White	83.0	79.2	80.7	80.6	73.1	70.9	85.9	85.7	71.4	90.3	86.5
Black	2.2	1.5	1.7	1.3	1.6	1.2	3.0	2.8	1.3	2.4	1.8
Asian/Pacific Islander	12.1	16.7	14.7	15.5	23.2	26.5	7.9	9.3	24.5	4.6	9.3
Hispanic	2.3	2.3	2.5	2.4	1.9	1.4	2.7	1.9	2.5	2.1	1.8
Native American	0.4	0.2	0.4	0.1	S	S	0.5	0.3	0.3	0.6	0.5
Age:											
Under 30	1.7	2.9	2.2	4.0	2.5	3.3	1.0	0.4	2.1	1.2	0.8
30 to 34	10.6	15.8	14.4	18.9	13.4	14.5	7.7	4.3	13.7	7.7	5.2
35 to 39	15.9	20.5	20.1	22.0	19.6	16.7	12.8	9.6	18.8	14.6	12.3
40 to 44	17.5	18.5	19.3	18.2	17.2	16.2	15.1	16.2	18.5	20.1	15.3
45 to 49	18.4	15.7	17.2	12.9	16.0	18.0	17.3	23.0	18.6	22.8	19.2
50 to 54	16.9	12.8	12.8	11.3	15.0	16.3	19.7	24.0	16.1	15.7	19.4
55 to 59	9.8	7.2	7.5	6.3	8.6	8.3	13.0	13.0	7.1	8.4	13.7
60 to 64	5.4	3.6	3.7	3.2	3.9	3.7	8.6	6.5	3.6	4.8	6.8
65 to 75	3.8	3.0	2.7	3.3	3.7	3.1	4.9	3.1	1.6	4.9	7.3
Citizenship status:											
U.S. total	91.6	87.6	88.9	86.1	87.7	86.0	93.4	96.1	83.1	97.4	94.4
U.S. native	80.7	75.2	77.5	75.2	70.3	65.7	84.0	84.9	68.0	90.7	85.9
U.S. naturalized	10.8	12.4	11.4	10.9	17.4	20.3	9.4	11.2	15.2	6.8	8.5
Non-U.S. total	8.4	12.4	11.1	13.9	12.3	14.0	6.6	3.9	16.9	2.6	5.6
Non-U.S., permanent resident	7.0	10.0	9.1	10.6	10.6	12.3	5.8	3.4	13.8	2.3	5.3
Non-U.S., temporary resident	1.4	2.4	2.0	3.3	1.7	1.6	0.8	0.4	3.1	0.3	0.4
Non-U.S., unspecified	S	S	S	S	S	S	S	S	S	S	S

See explanatory information and SOURCE at end of table.

Table 32. Employed doctoral scientists and engineers, by demographic characteristics and primary work activity: 1995

Page 2 of 2

Characteristics	Total	Research and development: Total	Research and development: Applied research	Research and development: Basic research	Research and development: Development	Research and development: Design	Teaching	Management, sales, and administration	Computer applications	Professional services	Other activities
	[Percentage distribution]										
Geographic division:											
New England	7.9	8.0	7.6	8.9	8.1	6.5	8.8	7.0	8.4	7.8	4.9
Middle Atlantic	16.8	16.6	16.2	16.8	18.0	16.7	16.5	17.2	16.4	17.9	16.2
East North Central	13.9	14.0	13.7	14.3	16.3	11.0	16.9	12.2	10.4	12.2	11.2
West North Central	6.1	5.6	5.4	6.3	5.5	3.9	8.1	5.6	3.7	5.7	5.9
South Atlantic	18.9	19.0	21.5	17.5	14.8	15.7	15.5	21.5	17.8	18.0	29.2
East South Central	4.1	3.6	3.7	4.1	2.6	1.9	5.7	3.8	2.6	4.2	3.2
West South Central	8.0	7.5	7.5	7.2	7.4	10.3	9.0	8.6	8.1	7.6	6.0
Mountain	6.5	6.8	7.1	6.4	5.6	8.2	6.2	6.3	6.8	6.3	7.1
Pacific	17.5	18.4	17.1	18.1	21.1	25.4	13.1	17.6	25.6	20.2	16.2
Other U.S.	0.3	0.5	0.4	0.5	0.6	S	0.1	0.3	S	S	S
Place of birth:											
U.S.	79.9	74.4	76.6	74.4	69.1	66.2	83.3	84.3	66.6	89.7	84.6
Europe	3.5	4.1	3.5	5.8	2.7	2.8	3.2	3.0	3.8	3.0	2.8
Asia	13.0	17.6	16.0	15.7	24.9	27.5	9.5	9.9	25.2	4.8	10.2
North America	0.9	1.1	1.0	1.4	0.5	1.2	0.8	0.6	0.4	1.1	0.3
Central America	0.3	0.3	0.3	0.4	0.3	S	0.4	0.1	0.4	S	S
Carribean	0.4	0.3	0.3	0.3	0.3	S	0.3	0.3	0.8	0.5	0.4
South America	0.7	0.8	0.8	0.8	1.0	S	0.7	0.5	0.7	0.4	0.6
Africa	1.1	1.1	1.2	0.9	1.0	1.3	1.6	0.9	1.7	0.3	0.3
Oceania	0.1	0.2	0.2	0.2	S	S	0.1	0.1	0.4	S	S
Unknown	0.1	0.1	S	0.1	S	S	0.1	0.1	S	0.1	0.5

KEY: S = Suppressed because fewer than 50 weighted cases reported (See NOTE below)

NOTE: All numbers in the table are estimates derived from a sample.

SOURCE: National Science Foundation/SRS, 1995 Survey of Doctorate Recipients

Table 33. Employed doctoral scientists and engineers, by demographic characteristics, race ethnicity, and sex: 1995

Page 1 of 2

Characteristics	Total			White			Black		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total	484,780	379,480	105,300	402,600	314,190	88,410	10,500	6,980	3,530
	[Percentage distribution]								
Age:									
Under 30	1.7	1.5	2.6	1.5	1.3	2.4	1.3	1.1	1.8
30 to 34	10.6	9.7	14.0	9.2	8.3	12.5	9.0	8.3	10.5
35 to 39	15.9	14.9	19.4	14.7	13.6	18.7	16.8	17.0	16.4
40 to 44	17.5	16.7	20.2	17.6	16.7	20.7	18.9	17.1	22.4
45 to 49	18.4	18.0	19.9	19.0	18.6	20.6	20.8	19.2	24.0
50 to 54	16.9	18.1	12.6	17.8	19.1	13.3	15.6	17.2	12.5
55 to 59	9.8	10.8	6.3	10.2	11.3	6.5	6.9	7.2	6.5
60 to 64	5.4	6.1	3.0	5.7	6.5	3.0	6.5	7.5	4.5
65 to 75	3.8	4.3	2.0	4.1	4.6	2.2	4.1	5.4	1.5
Citizenship status:									
U.S. total	91.6	91.2	92.9	97.0	96.9	97.5	84.2	79.1	94.2
U.S. native	80.7	79.6	84.8	92.1	91.7	93.4	70.6	62.2	87.3
U.S. naturalized	10.8	11.6	8.2	4.9	5.2	4.1	13.6	16.9	6.9
Non-U.S. total	8.4	8.8	7.1	3.0	3.1	2.5	15.8	20.9	5.8
Non-U.S., permanent resident	7.0	7.3	5.9	2.5	2.6	2.1	12.8	17.1	4.4
Non-U.S., temporary resident	1.4	1.5	1.2	0.5	0.5	0.4	3.0	3.9	S
Non-U.S., unspecified	S	S	S	S	S	S	S	S	S
Geographic division:									
New England	7.9	7.6	9.0	8.1	7.8	9.1	5.2	5.7	4.4
Middle Atlantic	16.8	16.4	18.3	16.6	16.1	18.5	15.3	15.4	15.1
East North Central	13.9	13.9	13.6	13.9	13.9	13.7	12.6	14.5	9.0
West North Central	6.1	6.3	5.5	6.4	6.6	5.7	4.3	5.4	2.0
South Atlantic	18.9	18.7	19.4	19.1	19.1	19.2	32.3	29.0	39.0
East South Central	4.1	4.3	3.6	4.2	4.4	3.6	6.4	7.0	5.3
West South Central	8.0	8.4	6.7	7.9	8.2	6.6	9.1	8.9	9.6
Mountain	6.5	6.9	5.1	6.9	7.3	5.3	2.4	2.5	2.2
Pacific	17.5	17.2	18.6	16.8	16.4	18.2	12.1	11.5	13.3
Other U.S.	0.3	0.3	0.2	0.2	0.2	0.1	S	S	S
Place of birth:									
U.S.	79.9	78.9	83.8	91.3	91.0	92.4	70.6	62.0	87.6
Europe	3.5	3.6	3.4	4.1	4.1	3.9	S	S	S
Asia	13.0	14.0	9.6	2.4	2.6	1.6	0.5	S	S
North America	0.9	0.9	0.9	1.0	1.0	1.1	S	S	S
Central America	0.3	0.3	0.2	0.1	0.1	S	S	S	S
Carribean	0.4	0.4	0.4	S	S	S	6.4	7.2	4.8
South America	0.7	0.6	0.9	0.2	0.2	0.3	0.9	1.0	S
Africa	1.1	1.2	0.5	0.7	0.8	0.3	20.8	28.4	5.8
Oceania	0.1	0.1	0.2	0.2	0.1	0.2	S	S	S
Unknown	0.1	0.1	0.1	0.1	0.1	0.2	S	S	S

See explanatory information and SOURCE at end of table.

Table 33. Employed doctoral scientists and engineers, by demographic characteristics, race ethnicity, and sex: 1995

Page 2 of 2

Characteristics	Asian or Pacific Islander			Hispanic			Native American		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total	58,660	48,630	10,030	11,110	8,270	2,840	1,820	1,360	470
	[Percentage distribution]								
Age:									
Under 30	3.1	2.7	4.9	2.6	2.1	4.1	S	S	S
30 to 34	19.8	18.0	28.0	14.8	14.8	14.8	S	S	S
35 to 39	22.8	22.4	24.7	21.6	19.3	28.1	11.8	13.0	S
40 to 44	16.2	16.3	15.8	18.1	17.3	20.6	9.6	8.6	12.4
45 to 49	14.1	14.5	12.2	14.9	15.0	14.8	23.4	16.4	43.8
50 to 54	10.5	11.2	6.8	16.2	17.9	11.3	27.9	31.3	18.1
55 to 59	8.2	8.8	5.2	6.8	8.4	2.4	11.2	12.9	S
60 to 64	3.4	3.7	1.9	2.8	2.7	2.9	8.6	10.0	S
65 to 75	2.0	2.3	0.6	2.2	2.5	S	3.4	4.2	S
Citizenship status:									
U.S. total	56.9	57.4	54.3	83.2	82.5	85.5	99.5	99.3	100.0
U.S. native	8.7	7.6	14.0	56.7	54.9	62.0	96.0	95.3	97.8
U.S. naturalized	48.2	49.8	40.3	26.5	27.5	23.5	3.5	3.9	S
Non-U.S. total	43.1	42.6	45.7	16.8	17.5	14.5	S	S	S
Non-U.S., permanent resident	36.0	35.4	39.0	13.3	14.4	9.8	S	S	S
Non-U.S., temporary resident	7.1	7.1	6.7	3.5	3.1	4.7	S	S	S
Non-U.S., unspecified	S	S	S	S	S	S	S	S	S
Geographic division:									
New England	7.6	6.9	10.9	6.6	7.2	5.2	3.5	4.2	S
Middle Atlantic	19.1	19.2	18.5	14.4	13.0	18.6	10.5	10.2	11.2
East North Central	14.9	14.6	16.1	10.1	10.2	9.8	12.5	13.6	S
West North Central	4.8	4.7	5.1	4.1	4.1	4.2	6.5	7.8	S
South Atlantic	15.0	15.3	13.8	19.3	18.8	20.8	12.4	12.7	11.5
East South Central	2.9	2.9	2.7	2.8	3.4	S	11.3	8.4	19.7
West South Central	8.1	8.5	6.1	9.6	10.0	8.5	18.6	23.7	S
Mountain	4.3	4.4	3.9	8.4	8.7	7.4	11.4	10.8	13.0
Pacific	22.6	22.6	22.3	23.8	23.6	24.3	13.4	8.5	27.4
Other U.S.	0.7	0.8	0.6	0.9	1.1	S	S	S	S
Place of birth:									
U.S.	7.9	6.9	12.5	55.4	53.3	61.3	96.0	95.3	97.8
Europe	0.4	0.4	S	3.3	3.2	3.6	S	S	S
Asia	90.9	91.9	86.1	1.8	2.0	S	4.0	4.7	S
North America	S	S	S	S	S	S	S	S	S
Central America	S	S	S	10.0	10.9	7.1	S	S	S
Carribean	0.1	0.1	S	8.7	9.3	6.9	S	S	S
South America	0.2	0.2	S	20.2	20.3	20.0	S	S	S
Africa	0.4	0.3	0.7	0.6	0.8	S	S	S	S
Oceania	S	S	S	S	S	S	S	S	S
Unknown	S	S	S	S	S	S	S	S	S

KEY: S = Suppressed because fewer than 50 weighted cases reported (See NOTE below)

NOTE: All numbers in the table are estimates derived from a sample.

SOURCE: National Science Foundation/SRS, 1995 Survey of Doctorate Recipients

Table 34. Employed doctoral scientists and engineers, by employment-related characteristics, race ethnicity, and sex: 1995

Page 1 of 2

Characteristics	Total			White			Black		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total	484,780	379,480	105,300	402,600	314,190	88,410	10,500	6,980	3,530
	[Percentage distribution]								
Sector of employment:									
Universities and 4-year colleges	45.9	44.9	49.4	46.4	45.6	49.1	54.6	54.0	55.7
Other educational institutions	2.6	2.0	4.6	2.7	2.2	4.6	5.0	4.0	7.0
Private-for-profit	30.3	33.1	20.1	28.5	31.1	18.9	20.1	23.9	12.5
Self-employed	5.9	4.9	9.4	6.6	5.4	10.5	3.9	3.2	5.2
Private not-for-profit	4.9	4.5	6.5	5.1	4.6	6.7	4.3	3.9	5.2
Federal government	7.1	7.5	6.0	7.5	7.9	6.0	7.1	6.2	8.9
State and local government	2.7	2.5	3.5	2.8	2.6	3.6	4.6	4.2	5.4
Other sector	0.6	0.6	0.6	0.5	0.5	0.4	S	S	S
Primary work activity:									
R&D	41.0	42.8	34.7	39.1	41.0	32.5	28.6	32.4	21.2
Applied research	20.2	21.0	17.1	19.6	20.6	16.1	15.8	18.6	10.2
Basic research	13.7	13.5	14.2	13.3	13.2	13.5	8.0	8.4	7.1
Development	4.9	5.5	2.7	4.3	4.9	2.2	3.5	3.5	3.5
Design	2.3	2.8	0.8	2.0	2.4	0.7	1.3	1.8	S
Teaching	22.1	21.4	24.6	22.8	22.2	25.1	30.1	30.0	30.3
Management, sales, and administration	16.4	17.3	13.0	16.9	17.9	13.4	21.5	22.5	19.6
Computer applications	4.4	5.0	1.9	3.7	4.4	1.6	2.7	3.2	1.7
Professional services	12.3	9.8	21.5	13.4	10.7	23.0	13.8	8.8	23.8
Other activities	3.8	3.7	4.3	4.0	3.9	4.5	3.3	3.2	3.4
Federal support:									
Receiving support	28.3	29.0	25.8	28.2	28.9	25.4	23.7	24.7	21.6
Not receiving support	71.7	71.0	74.2	71.8	71.1	74.6	76.3	75.3	78.4
Relationship between degree/job									
Closely related	68.2	67.0	72.5	68.5	67.3	72.9	71.5	69.3	75.7
Somewhat related	24.1	24.9	20.9	23.5	24.3	20.6	21.6	23.0	18.9
Not related	7.7	8.1	6.6	7.9	8.3	6.6	6.9	7.7	5.3

See explanatory information and SOURCE at end of table.

Table 34. Employed doctoral scientists and engineers, by employment-related characteristics, race/ethnicity, and sex: 1995

Page 2 of 2

Characteristics	Asian			Hispanic			Native American		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total	58,660	48,630	10,030	11,110	8,270	2,840	1,820	1,360	470
	[Percentage distribution]								
Sector of employment:									
Universities and 4-year colleges	39.7	38.2	46.7	52.6	50.1	59.9	49.4	49.2	50.0
Other educational institutions	1.0	0.7	2.1	3.1	1.6	7.5	4.4	4.2	S
Private-for-profit	45.9	48.3	34.7	24.8	29.0	12.6	19.2	18.5	21.3
Self-employed	2.0	2.0	2.3	3.6	3.6	3.5	9.1	9.7	S
Private not-for-profit	3.7	3.5	4.3	5.9	4.5	9.8	3.2	S	S
Federal government	4.7	4.5	5.4	7.0	7.9	4.4	7.5	7.2	S
State and local government	2.1	1.9	2.6	1.7	1.8	S	5.1	5.3	S
Other sector	1.0	0.8	1.8	1.3	1.4	S	S	S	S
Primary work activity:									
R&D	56.6	56.2	58.5	41.5	42.7	37.9	27.1	28.1	24.4
Applied research	24.6	24.0	27.3	21.6	22.3	19.6	20.6	20.9	19.9
Basic research	17.5	16.3	23.3	14.3	14.9	12.8	4.9	5.7	S
Development	9.3	9.9	6.5	4.1	4.2	3.9	S	S	S
Design	5.1	5.9	1.4	1.4	1.3	S	S	S	S
Teaching	14.4	14.1	16.1	25.8	23.8	31.5	32.0	35.2	22.6
Management, sales, and administration	12.6	13.4	8.5	13.7	14.8	10.3	12.1	13.1	S
Computer applications	8.8	9.4	5.9	4.7	6.2	S	3.4	4.6	S
Professional services/other	4.6	3.9	8.1	11.3	9.4	17.0	19.9	12.3	42.0
Other activities	3.0	3.0	3.0	3.0	3.1	2.8	5.5	6.8	S
Federal support:									
Receiving support	29.3	29.3	29.6	31.5	32.2	29.5	20.5	19.9	22.1
Not receiving support	70.7	70.7	70.4	68.5	67.8	70.5	79.5	80.1	77.9
Relationship between degree/job									
Closely related	64.1	63.6	66.5	73.6	72.0	78.4	73.4	71.6	78.6
Somewhat related	28.8	29.4	25.9	21.3	23.1	16.0	19.1	19.8	17.0
Not related	7.1	7.0	7.6	5.1	4.9	5.7	7.6	8.6	S

KEY: S = Suppressed because fewer than 50 weighted cases reported (See NOTE below)

NOTE: All numbers in the table are estimates derived from a sample.

SOURCE: National Science Foundation/SRS, 1995 Survey of Doctorate Recipients

Table 35. Employed doctoral scientists and engineers, by employment-related characteristics and sector of employment: 1995

Page 1 of 2

Characteristics	Total	Universities and 4-year colleges	Other educational institutions	Private for-profit	Self-employed	Private not-for-profit	Federal government	State & local government	Other sector
Total	484,780	222,530	12,410	146,720	28,550	23,840	34,650	13,330	2,750
	[Percentage distribution]								
Field of doctorate:									
Sciences	83.8	88.5	97.1	71.2	91.6	90.5	86.1	95.3	93.4
Computer and mathematical sciences	6.0	8.0	5.6	5.4	2.0	3.7	3.2	1.2	3.1
Computer and information sciences	1.3	1.4	0.6	1.9	0.3	0.6	0.4	S	S
Mathematical sciences	4.7	6.6	5.0	3.5	1.7	3.2	2.8	0.8	2.2
Life and related sciences	27.3	32.4	23.9	21.0	15.5	26.6	33.9	25.7	13.8
Agricultural and food sciences	3.2	3.3	2.3	3.4	2.6	1.5	4.5	2.0	S
Biological and health sciences	23.3	28.5	21.2	17.0	12.6	24.7	26.7	21.4	11.7
Environmental sciences	0.8	0.7	0.4	0.6	0.3	0.4	2.7	2.3	S
Physical and related sciences	20.9	17.2	19.1	29.8	10.2	17.2	24.2	8.6	10.2
Chemistry, except biochemistry	10.8	7.2	11.4	19.8	5.0	6.3	7.2	4.1	6.2
Geology and oceanography	2.7	2.7	2.2	2.0	1.8	2.5	6.6	2.4	S
Physics and astronomy	7.1	7.1	5.5	7.9	3.3	8.1	9.6	1.3	2.6
Other physical sciences (incl. earth)	0.3	0.2	S	0.2	S	0.3	0.8	0.9	S
Social and related sciences	29.6	30.8	48.4	14.9	63.9	43.0	24.8	59.8	66.2
Economics	4.1	5.5	2.0	1.6	2.9	2.7	5.9	3.2	42.9
Political and related sciences	3.1	4.4	3.6	0.9	2.6	3.2	3.0	5.5	3.8
Psychology	15.6	11.8	32.3	9.9	53.0	28.8	10.4	39.6	8.1
Sociology and anthropology	4.2	6.0	7.3	1.2	3.6	5.5	3.2	6.8	5.0
Other social sciences	2.6	3.2	3.3	1.4	1.8	2.8	2.2	4.8	6.5
Engineering	16.2	11.5	2.9	28.8	8.4	9.5	13.9	4.7	6.6
Aerospace/aeronautical	0.7	0.5	S	0.9	0.9	0.4	1.2	S	S
Chemical	2.3	1.1	0.5	5.0	1.2	1.3	1.1	S	2.1
Civil	1.5	1.4	S	2.1	0.8	0.9	1.3	2.0	S
Electrical/computer	4.3	2.8	0.5	8.4	2.0	2.0	2.7	S	S
Industrial	0.5	0.6	S	0.5	0.3	0.3	0.3	S	S
Mechanical	2.0	1.4	0.7	3.6	0.8	1.5	1.6	S	S
Other engineering	5.0	3.7	0.8	8.2	2.5	3.1	5.7	2.2	2.1
Year of doctorate:									
1993-94 graduates	8.6	10.0	9.2	7.5	3.3	10.1	7.1	8.5	11.0
1990-92 graduates	12.1	12.2	11.6	12.4	8.0	15.8	10.7	11.7	11.8
1985-89 graduates	17.6	17.2	16.7	18.7	15.5	17.7	17.1	20.5	14.0
1980-84 graduates	15.6	14.0	17.1	16.9	19.4	16.3	14.8	18.5	10.0
1970-79 graduates	30.0	28.1	34.8	30.7	32.3	28.1	36.4	30.7	33.3
1960-69 graduates	13.3	15.4	9.3	11.5	15.4	8.6	12.4	8.4	16.6
Pre-1960 graduates	2.8	3.0	1.4	2.3	6.1	3.4	1.5	1.6	3.3

See explanatory information and SOURCE at end of table.

Table 35. Employed doctoral scientists and engineers, by employment-related characteristics and sector of employment: 1995

Page 2 of 2

Characteristics	Total	Universities and 4-year colleges	Other educational institutions	Private for-profit	Self-employed	Private not-for-profit	Federal government	State & local government	Other sector
	[Percentage distribution]								
Primary work activity:									
R&D	41.0	40.0	2.9	49.0	16.5	41.9	54.5	21.7	45.2
Applied research	20.2	15.3	1.7	27.4	9.6	23.0	35.5	16.0	31.2
Basic research	13.7	23.5	0.8	2.8	1.7	13.5	15.4	3.6	2.9
Development	4.9	0.7	S	12.9	3.7	3.5	1.9	1.1	9.6
Design	2.3	0.4	S	6.0	1.5	1.9	1.6	1.0	S
Teaching	22.1	43.5	66.5	0.5	1.9	1.5	0.4	0.8	S
Management, sales, and administration	16.4	9.4	9.9	24.9	10.4	22.8	22.3	28.5	23.1
Computer applications	4.4	1.3	0.7	9.5	4.2	3.7	4.2	4.8	2.9
Professional services	12.3	4.3	17.1	11.9	59.3	24.8	9.3	32.9	11.7
Other activities	3.8	1.5	2.9	4.2	7.7	5.4	9.3	11.3	17.1

KEY: S = Suppressed because fewer than 50 weighted cases reported (See NOTE below)

NOTE: All numbers in the table are estimates derived from a sample.

SOURCE: National Science Foundation/SRS, 1995 Survey of Doctorate Recipients

Table 36. Employed doctoral scientists and engineers, by employment-related characteristics and primary work activity: 1995

Page 1 of 2

Characteristics	Total	Research and development: Total	Research and development: Applied research	Research and development: Basic research	Research and development: Development	Research and development: Design	Teaching	Management, sales, and administration	Computer applications	Professional services	Other activities
Total	484,780	198,890	97,780	66,190	23,590	11,340	106,970	79,380	21,120	59,810	18,620
	[Percentage distribution]										
Sciences	83.8	80.4	80.1	94.1	60.2	45.0	88.1	80.1	69.1	96.6	86.2
Computer and mathematical sciences	6.0	4.4	3.9	5.4	2.6	6.9	11.1	4.1	19.5	0.9	3.7
Computer and information sciences	1.3	1.2	1.2	1.1	0.9	2.1	1.7	0.8	7.3	S	0.4
Mathematical sciences	4.7	3.2	2.7	4.3	1.7	4.8	9.4	3.3	12.2	0.9	3.2
Life and related sciences	27.3	33.8	30.4	49.5	17.2	6.6	22.3	26.1	9.7	21.3	30.3
Agricultural and food sciences	3.2	4.1	6.0	2.2	3.7	0.8	1.8	3.8	1.9	1.3	5.9
Biological and health sciences	23.3	28.9	23.2	47.0	12.9	5.3	19.7	21.2	7.3	19.6	23.1
Environmental sciences	0.8	0.8	1.2	0.4	0.7	0.5	0.7	1.0	0.5	0.4	1.3
Physical and related sciences	20.9	26.4	26.2	25.0	32.9	22.8	16.0	22.5	27.7	6.6	21.7
Chemistry, except biochemistry	10.8	13.7	14.7	10.3	21.8	8.3	7.8	13.1	8.0	4.1	12.3
Geology and oceanography	2.7	3.3	3.8	3.9	1.3	0.5	2.7	2.3	2.8	0.8	3.7
Physics and astronomy	7.1	9.0	7.2	10.6	9.7	13.8	5.3	6.9	16.7	1.4	5.3
Other physical sciences (incl. earth)	0.3	0.3	0.5	0.2	S	S	0.2	0.2	S	0.2	0.4
Social and related sciences	29.6	15.7	19.6	14.2	7.6	8.7	38.8	27.4	12.3	67.9	30.6
Economics	4.1	3.4	4.9	2.2	1.4	1.5	7.1	4.0	1.3	1.9	4.9
Political sci and related sciences	3.1	1.5	1.9	1.2	1.0	1.4	6.3	3.6	1.5	1.4	5.2
Psychology	15.6	6.2	7.1	6.4	3.1	4.0	12.1	13.0	5.2	61.1	13.1
Sociology and anthropology	4.2	2.8	3.4	3.0	0.9	0.8	8.6	4.2	2.1	2.0	4.4
Other social sciences	2.6	1.7	2.2	1.3	1.1	1.0	4.6	2.6	2.2	1.5	3.0
Engineering	16.2	19.6	19.9	5.9	39.8	55.0	11.9	19.9	30.9	3.4	13.8
Aerospace/aeronautical	0.7	0.8	1.1	0.3	1.2	1.7	0.5	0.9	1.2	S	0.5
Chemical	2.3	3.0	2.9	0.9	7.2	8.1	0.9	3.3	3.1	0.3	2.6
Civil	1.5	1.5	1.5	0.3	1.7	8.5	1.6	1.8	2.5	0.7	1.2
Electrical/computer	4.3	5.0	4.8	1.3	12.4	13.2	2.9	5.6	11.8	0.4	3.2
Industrial	0.5	0.3	0.4	S	S	1.2	0.9	0.6	1.0	S	S
Mechanical	2.0	2.6	2.5	0.8	5.6	7.5	1.6	2.1	3.4	0.4	1.5
Other engineering	5.0	6.4	6.9	2.2	11.6	14.9	3.4	5.7	7.8	1.5	4.7

See explanatory information and SOURCE at end of table.

Table 36. Employed doctoral scientists and engineers, by employment-related characteristics and primary work activity: 1995

Page 2 of 2

Characteristics	Total	Research and development: Total	Research and development: Applied research	Research and development: Basic research	Research and development: Development	Research and development: Design	Teaching	Management, sales, and administration	Computer applications	Professional services	Other activities
	[Percentage distribution]										
Year of doctorate:											
1993-94 graduates	8.6	11.6	10.6	14.0	9.4	10.8	7.2	2.8	11.2	8.3	7.3
1990-92 graduates	12.1	15.5	15.8	16.0	13.4	13.8	10.4	5.9	14.0	12.7	7.6
1985-89 graduates	17.6	20.4	21.2	19.7	19.7	19.3	15.6	12.8	18.6	18.8	15.7
1980-84 graduates	15.6	15.2	15.6	15.3	14.3	12.9	13.7	16.7	17.5	18.5	14.1
1970-79 graduates	30.0	24.4	24.5	20.9	30.2	32.0	32.3	41.1	28.3	29.7	32.4
1960-69 graduates	13.3	10.3	10.0	11.0	10.4	8.9	17.8	18.0	9.0	9.3	18.0
Pre-1960 graduates	2.8	2.6	2.4	3.1	2.6	2.3	3.1	2.8	1.4	2.6	5.0
Sector of employment:											
Universities & 4-yr colleges	45.9	44.7	34.7	79.1	7.1	8.3	90.6	26.5	13.6	15.8	18.3
Other educational institutions	2.6	0.2	0.2	0.1	S	S	7.7	1.5	0.4	3.5	1.9
Private-for-profit	30.3	36.2	41.1	6.2	80.2	77.3	0.7	46.1	65.7	29.2	33.2
Self-employed	5.9	2.4	2.8	0.7	4.5	3.8	0.5	3.7	5.7	28.3	11.8
Private not-for-profit	4.9	5.0	5.6	4.9	3.5	3.9	0.3	6.8	4.2	9.9	6.9
Federal government	7.1	9.5	12.6	8.1	2.9	5.0	0.1	9.7	7.0	5.4	17.3
State and local government	2.7	1.5	2.2	0.7	0.6	1.1	0.1	4.8	3.0	7.3	8.1
Other sector	0.6	0.6	0.9	0.1	1.1	S	S	0.8	0.4	0.5	2.5

KEY: S = Suppressed because fewer than 50 weighted cases reported (See NOTE below)

NOTE: All numbers in the table are estimates derived from a sample.

SOURCE: National Science Foundation/SRS, 1995 Survey of Doctorate Recipients

Table 37. Employed doctoral scientists and engineers, by field of doctorate and broad occupation: 1995

Field of doctorate	Total	Broad occupation: Total	Computer and mathematical scientists: Non-teacher	Computer and mathematical scientists: Postsec. teacher	Life and related scientists: Non-teacher	Life and related scientists: Postsec. teacher	Physical and related scientists: Non-teacher	Physical and related scientists: Postsec. teacher	Social and related scientists: Non-teacher	Social and related scientists: Postsec. teacher	Engineers: Non-teacher	Engineers: Postsec. teacher	Non-S&E Occupations: Total	Non-S&E Occupations: Managers	Non-S&E Occupations: Health	Non-S&E Occupations: Teacher	Non-S&E Occupations: Other
		[Percentage distribution]															
Total	484,780	100.0	4.2	3.6	11.6	6.1	9.0	4.6	10.9	8.8	8.8	3.2	29.2	17.3	2.8	3.9	5.2
Sciences	406,130	100.0	3.8	3.9	13.6	7.3	10.2	5.4	12.9	10.5	2.1	0.3	30.0	16.7	3.2	4.5	5.6
Computer and mathematical sciences	29,250	100.0	25.9	48.3	0.4	0.2	0.5	0.2	S	0.3	2.9	0.8	20.2	12.1	0.4	2.5	5.2
Computer and information sciences	6,440	100.0	40.2	33.3	0.8	S	S	S	S	S	2.3	S	21.5	11.6	S	3.9	5.6
Mathematical sciences	22,820	100.0	21.9	52.6	0.3	S	0.6	0.3	S	S	3.0	0.9	19.9	12.3	0.4	2.1	5.1
Life and related sciences	132,190	100.0	1.4	0.3	37.3	20.4	1.8	1.2	0.6	0.4	0.8	0.1	35.8	17.3	7.5	5.7	5.2
Agricultural and food sciences	15,440	100.0	1.0	0.4	43.6	18.4	3.8	0.9	S	0.4	1.1	S	30.1	16.9	2.6	1.9	8.7
Biological and health sciences	112,870	100.0	1.3	0.3	36.7	20.8	1.4	1.1	0.6	0.3	0.6	0.1	36.8	17.3	8.4	6.4	4.8
Environmental sciences	3,890	100.0	3.2	S	29.3	16.5	6.7	6.0	1.6	2.3	5.1	S	28.5	21.2	1.8	S	4.6
Physical and related sciences	101,300	100.0	3.2	0.6	4.3	1.3	38.2	19.4	0.2	0.1	6.0	0.8	26.1	17.6	1.2	1.2	6.1
Chemistry, except biochemistry	52,540	100.0	1.8	0.2	6.1	1.2	38.8	18.1	0.1	S	3.8	0.3	29.6	20.4	1.7	1.2	6.2
Geology and oceanography	13,090	100.0	1.8	0.5	1.9	1.2	47.5	25.8	S	S	2.7	0.5	17.5	12.5	S	1.0	3.7
Physics and astronomy	34,410	100.0	5.9	1.4	1.6	1.3	34.2	19.1	0.3	0.2	10.4	1.6	24.0	15.2	0.8	1.2	6.8
Other physical sciences (incl. earth)	1,260	100.0	S	S	24.6	5.5	22.3	10.9	S	S	9.2	S	26.2	19.4	S	S	S
Social and related sciences	143,390	100.0	2.0	0.5	1.2	0.8	0.2	0.3	36.0	29.4	0.3	0.1	29.3	16.4	1.0	6.2	5.7
Economics	19,860	100.0	1.1	0.4	0.6	0.8	S	S	25.5	43.4	S	S	28.0	17.2	0.6	7.1	3.1
Political sci and related sciences	14,790	100.0	1.4	0.7	S	S	0.3	S	9.9	48.0	S	S	39.2	22.2	0.6	6.1	10.2
Psychology	75,810	100.0	1.7	0.1	1.7	0.8	0.1	S	53.7	18.8	0.5	0.1	22.6	14.0	1.0	3.4	4.2
Sociology and anthropology	20,530	100.0	2.0	0.4	1.0	0.6	S	S	15.1	46.5	S	S	34.3	18.6	1.2	7.2	7.2
Other social sciences	12,410	100.0	5.8	2.6	0.6	1.8	1.2	3.0	10.6	21.3	S	0.5	52.4	19.1	2.1	19.7	11.5
Engineering	78,650	100.0	6.1	1.7	1.1	0.4	2.8	0.5	0.1	0.1	43.9	18.1	25.2	20.4	0.8	0.8	3.2
Aerospace/aeronautical	3,350	100.0	1.5	S	S	S	3.5	S	S	S	46.4	21.3	25.6	22.0	S	S	2.8
Chemical	10,930	100.0	3.4	S	0.6	0.5	1.6	0.5	S	S	54.6	12.1	26.6	22.5	0.8	S	2.9
Civil	7,400	100.0	2.8	0.8	S	S	1.8	S	S	S	42.6	31.0	20.6	17.7	S	0.7	1.9
Electrical/computer	20,780	100.0	11.9	2.7	0.5	0.3	1.3	0.3	S	S	38.2	17.2	27.4	23.4	0.6	S	3.3
Industrial	2,240	100.0	13.5	5.7	S	S	S	S	S	S	15.6	30.8	31.1	19.6	S	7.9	2.6
Mechanical	9,710	100.0	2.5	0.8	1.2	S	1.7	0.8	S	S	50.7	21.8	20.3	16.8	0.7	S	2.9
Other engineering	24,230	100.0	4.7	2.0	2.1	0.6	5.5	1.0	0.2	S	43.9	14.4	25.4	19.0	1.1	1.3	3.9

KEY: S = Suppressed because fewer than 50 weighted cases reported (See NOTE below)

NOTE: All numbers in the table are estimates derived from a sample.

SOURCE: National Science Foundation/SRS, 1995 Survey of Doctorate Recipients

Table 38. Median annual salaries of doctoral scientists and engineers, by field of doctorate, race ethnicity, and sex: 1995

Page 1 of 2

Field of doctorate	Total			White			Black		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total	$60,200	$65,000	$50,000	$62,000	$65,000	$50,000	$55,000	$57,000	$51,000
Sciences	60,000	62,000	50,000	60,000	63,000	50,000	53,000	55,000	51,000
Computer and mathematical sciences	60,000	61,000	53,000	62,000	64,000	54,000	57,000	57,000	S
Computer and information sciences	65,000	66,000	56,500	66,000	68,000	56,000	S	S	S
Mathematical sciences	60,000	60,000	51,000	60,900	62,000	52,600	55,000	57,000	S
Life and related sciences	57,000	60,000	49,000	58,000	60,800	50,000	51,000	53,000	50,000
Agricultural and food sciences	55,000	57,500	45,000	56,200	58,500	45,000	47,000	47,000	S
Biological and health sciences	57,700	60,100	50,000	59,000	62,000	50,000	52,000	54,200	50,000
Environmental sciences	55,900	57,000	48,000	56,500	58,000	48,900	S	S	S
Physical and related sciences	66,000	68,000	56,000	68,500	70,000	58,800	59,000	59,000	S
Chemistry, except biochemistry	68,000	70,000	58,800	70,000	71,000	60,000	57,500	59,000	S
Geology and oceanography	60,000	60,000	50,000	60,000	62,000	50,000	S	S	S
Physics and astronomy	68,000	69,000	57,000	70,000	70,000	60,000	65,000	65,000	S
Other physical sciences (incl. earth)	50,000	54,000	42,000	50,000	53,500	45,000	S	S	S
Social and related sciences	55,500	60,000	50,000	56,000	60,000	50,000	52,300	54,000	51,600
Economics	65,000	65,000	60,000	65,000	66,000	62,000	60,000	68,000	S
Political and related sciences	55,000	56,500	50,000	55,000	58,000	50,000	60,000	60,000	60,000
Psychology	56,000	60,000	50,000	56,000	60,000	50,000	56,000	58,000	55,000
Sociology and anthropology	50,000	51,000	46,000	50,000	52,000	47,000	50,000	50,000	50,000
Other social sciences	50,000	56,100	47,500	52,800	60,000	48,800	42,000	42,000	S
Engineering	70,000	70,000	58,200	72,200	74,000	60,000	65,900	66,500	S
Aerospace/aeronautical	72,000	70,000	S	72,500	72,500	S	S	S	S
Chemical	73,000	74,600	61,600	75,000	76,000	61,600	S	S	S
Civil	65,000	65,000	54,000	66,000	67,000	52,000	S	S	S
Electrical/computer	75,000	75,000	58,800	78,000	79,400	54,800	68,000	70,000	S
Industrial	60,000	60,000	54,000	59,000	60,000	52,000	S	S	S
Mechanical	67,000	67,000	62,000	70,000	70,000	S	S	S	S
Other engineering	69,500	70,000	56,000	70,000	71,000	58,000	80,000	80,000	S

See explanatory information and SOURCE at end of table.

Table 38. Median annual salaries of doctoral scientists and engineers, by field of doctorate, race ethnicity, and sex: 1995

Page 2 of 2

Field of doctorate	Asian or Pacific Islander			Hispanic			Native American		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total	$60,000	$61,000	$48,000	$54,400	$58,000	$42,000	$52,000	$52,000	$49,000
Sciences	53,300	56,000	47,000	52,000	56,000	41,000	50,000	50,000	48,000
Computer and mathematical sciences	55,000	57,000	54,000	49,900	50,000	S	S	S	S
Computer and information sciences	60,400	62,000	S	S	S	S	S	S	S
Mathematical sciences	50,000	50,000	50,000	48,000	49,900	S	S	S	S
Life and related sciences	49,000	52,000	40,000	52,500	55,000	40,500	56,000	65,000	S
Agricultural and food sciences	50,000	52,000	45,000	51,000	55,000	S	S	S	S
Biological and health sciences	48,500	52,000	40,000	53,400	60,000	40,500	56,000	S	S
Environmental sciences	48,000	50,000	S	S	S	S	S	S	S
Physical and related sciences	60,000	60,600	52,100	60,200	62,000	40,000	73,000	73,000	S
Chemistry, except biochemistry	60,000	63,300	52,800	60,000	63,000	S	S	S	S
Geology and oceanography	45,000	46,000	S	55,000	56,000	S	S	S	S
Physics and astronomy	60,000	60,000	55,000	62,900	62,900	S	S	S	S
Other physical sciences (incl. earth)	S	S	S	S	S	S	S	S	S
Social and related sciences	50,900	53,000	46,100	48,500	53,000	43,100	46,000	45,000	48,000
Economics	53,000	53,000	55,800	70,000	63,000	S	S	S	S
Political and related sciences	56,000	58,000	S	42,000	42,000	S	S	S	S
Psychology	50,000	52,000	48,000	51,000	56,000	45,000	50,000	50,000	48,000
Sociology and anthropology	43,000	48,000	37,500	45,000	50,000	40,000	S	S	S
Other social sciences	48,000	57,000	42,000	40,000	47,000	S	S	S	S
Engineering	65,600	66,900	54,000	62,900	64,000	S	S	S	S
Aerospace/aeronautical	65,000	65,000	S	S	S	S	S	S	S
Chemical	70,000	70,000	S	60,000	60,000	S	S	S	S
Civil	62,500	62,500	S	50,000	50,000	S	S	S	S
Electrical/computer	69,000	70,000	60,000	65,000	65,000	S	S	S	S
Industrial	65,000	65,000	S	S	S	S	S	S	S
Mechanical	60,000	60,000	S	S	S	S	S	S	S
Other engineering	64,000	65,000	50,000	65,000	70,000	S	S	S	S

KEY: S = Median based on fewer than 200 weighted cases--suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: All numbers in the table are estimates derived from a sample.
Median salaries were computed for full-time employed individuals only.

SOURCE: National Science Foundation/SRS, 1995 Survey of Doctorate Recipients

Table 39. Median annual salaries of doctoral scientists and engineers, by occupation, race ethnicity, and sex: 1995

Page 1 of 2

Occupation	Total			White			Black		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total	$60,200	$65,000	$50,000	$62,000	$65,000	$50,000	$55,000	$57,000	$51,000
Scientists	55,000	59,000	47,000	56,300	60,000	48,000	50,000	51,000	46,000
Computer and mathematical scientists	60,000	60,000	51,300	60,000	61,000	52,000	55,000	55,000	S
Computer and information scientists	69,000	70,000	61,000	70,000	70,000	61,000	S	S	S
Mathematical scientists	66,000	67,500	55,000	68,000	69,500	61,000	S	S	S
Postsecondary teachers, computer and mathematical sciences	51000	52000	45000	52000	54000	47000	51,000	52,000	S
Life and related scientists	53,300	56,000	44,000	55,000	58,000	45,000	46,000	47,000	43,000
Agricultural scientists	54,000	56,500	44,500	55,000	58,000	45,000	S	S	S
Biological scientists	53,000	57,000	41,500	55,000	60,000	45,000	42,000	36,000	S
Forestry and conservation scientists	59,000	64,000	S	60,000	64,000	S	S	S	S
Postsecondary teachers, life and related sciences	53,800	55,000	46,000	54,000	55,500	47,000	47,000	47,000	42,000
Physical and related scientists	60,000	61,000	52,000	61,000	62,000	52,000	53,300	53,300	S
Chemists, except biochemists	65,000	67,000	60,000	68,000	69,000	61,000	62,500	62,500	S
Earth scientists	65,000	65,000	62,700	65,000	65,000	64,500	S	S	S
Physicists and astronomers	64,400	65,100	51,000	67,000	68,700	47,000	S	S	S
Other physical scientists	65,000	65,000	61,000	65,000	65,000	S	S	S	S
Postsecondary teachers, physical and related sciences	50,000	51,100	40,000	50,000	52,000	40,000	41,000	41,000	S
Social and related scientists	53,000	56,000	47,500	54,000	57,000	47,500	50,000	51,000	50,000
Economists	75,000	75,000	72,000	75,000	75,000	75,000	S	S	S
Political scientists	60,000	60,000	63,200	70,000	75,000	63,200	S	S	S
Psychologists	58,000	60,800	50,000	59,000	62,000	50,000	58,000	60,000	56,000
Sociologists and anthropologists	52,000	55,000	52,000	54,000	55,000	52,000	S	S	S
S&T historians and other social scientists	53,000	59,800	45,500	53,700	61,000	45,000	S	S	S
Postsecondary teachers, social and related sciences	49,000	51,000	43,000	50,000	52,000	43,000	45,000	46,000	44,700
Engineers	67,000	67,000	58,300	68,600	70,000	58,300	65,000	65,000	S
Aerospace and related engineers	70,000	70,000	S	75,000	75,000	S	S	S	S
Chemical engineers	70,000	70,000	61,900	71,900	72,000	61,700	S	S	S
Civil and architectural engineers	60,800	60,600	S	68,000	67,500	S	S	S	S
Electric and related engineers	72,000	72,000	64,000	75,000	75,000	S	S	S	S
Industrial engineers	66,300	66,300	S	70,000	76,300	S	S	S	S
Mechanical engineers	66,300	67,000	S	73,200	73,200	S	S	S	S
Other engineers	67,000	68,000	62,000	69,300	70,000	62,500	S	S	S
Postsecondary teachers, engineering	60,000	60,000	53,000	60,000	62,000	52,600	64,000	63,000	S
Non-S&E occupations	73,500	79,000	55,000	75,000	80,000	55,000	60,000	62,500	56,000
Managers, administrators, etc.	84,800	87,600	69,000	85,000	88,000	69,600	70,500	72,300	65,000
Health and related occupations	65,000	77,000	50,000	67,000	80,000	50,000	60,200	S	S
Teachers, except S&E postsecondary teachers	50,000	53,000	47,000	50,000	53,000	47,000	50,000	52,000	48,000
Social services and related occupations	38,000	36,400	40,000	38,000	38,000	38,000	S	S	S
Technologists, etc.	62,000	63,000	44,000	62,000	64,000	52,200	S	S	S
Sales and marketing occupations	67,000	68,000	60,000	68,000	70,000	58,000	S	S	S
Other non-S&E occupations	52,000	53,700	50,000	54,000	54,900	50,000	42,000	S	S

See explanatory information and SOURCE at end of table.

Table 39. Median annual salaries of doctoral scientists and engineers, by occupation, race ethnicity, and sex: 1995

Page 2 of 2

Occupation	Asian or Pacific Islander			Hispanic			Native American		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total	$60,000	$61,000	$48,000	$54,400	$58,000	$42,000	$52,000	$52,000	$49,000
Scientists	50,900	53,000	45,000	49,200	52,000	40,000	50,000	50,000	48,000
Computer and mathematical scientists	60,000	60,000	54,500	48,000	49,900	S	S	S	S
Computer and information scientists	65,000	65,600	63,000	65,000	65,000	S	S	S	S
Mathematical scientists	60,300	65,000	S	S	S	S	S	S	S
Postsecondary teachers, computer and mathematical sciences	47,500	48,000	42,100	45,500	46,200	S	S	S	S
Life and related scientists	42,000	46,000	35,000	44,700	52,000	37,600	59,900	S	S
Agricultural scientists	52,000	53,200	S	51,000	S	S	S	S	S
Biological scientists	38,000	41,000	33,000	44,000	52,000	35,000	S	S	S
Forestry and conservation scientists	S	S	S	S	S	S	S	S	S
Postsecondary teachers, life and related sciences	50,000	52,000	42,000	43,000	45,000	S	S	S	S
Physical and related scientists	53,000	54,000	52,800	55,000	57,000	39,400	S	S	S
Chemists, except biochemists	60,000	60,000	56,000	57,000	55,000	S	S	S	S
Earth scientists	47,500	47,500	S	S	S	S	S	S	S
Physicists and astronomers	44,000	41,000	54,000	S	S	S	S	S	S
Other physical scientists	67,000	S	S	S	S	S	S	S	S
Postsecondary teachers, physical and related sciences	50,000	50,000	43,000	50,200	52,000	S	S	S	S
Social and related scientists	50,000	50,900	47,000	46,000	50,000	41,000	48,000	46,000	S
Economists	67,000	70,000	60,000	S	S	S	S	S	S
Political scientists	S	S	S	S	S	S	S	S	S
Psychologists	50,000	54,900	47,500	51,000	56,000	45,000	50,000	S	S
Sociologists and anthropologists	S	S	S	S	S	S	S	S	S
S&T historians and other social scientists	S	S	S	S	S	S	S	S	S
Postsecondary teachers, social and related sciences	46,900	48,200	42,000	44,000	48,100	40,000	43,700	45,000	S
Engineers	64,000	64,500	57,200	57,000	59,000	S	S	S	S
Aerospace and related engineers	68,000	67,700	S	S	S	S	S	S	S
Chemical engineers	68,000	68,000	S	S	S	S	S	S	S
Civil and architectural engineers	58,000	58,300	S	S	S	S	S	S	S
Electric and related engineers	69,300	70,000	S	65,000	S	S	S	S	S
Industrial engineers	52,000	51,000	S	S	S	S	S	S	S
Mechanical engineers	60,000	60,000	S	S	S	S	S	S	S
Other engineers	63,000	63,000	61,000	66,000	66,000	S	S	S	S
Postsecondary teachers, engineering	57,400	58,000	S	53,300	53,300	S	S	S	S
Non-S&E occupations	72,000	75,000	52,000	70,000	72,000	50,000	50,000	55,000	S
Managers, administrators, etc.	86,400	90,000	65,000	80,000	83,700	61,800	58,400	S	S
Health and related occupations	43,000	54,000	36,000	77,900	S	S	S	S	S
Teachers, except S&E postsecondary teachers	49,000	56,000	36,400	45,000	S	41,700	S	S	S
Social services and related occupations	S	S	S	S	S	S	S	S	S
Technologists, etc.	62,000	62,000	S	S	S	S	S	S	S
Sales and marketing occupations	55,000	55,000	S	S	S	S	S	S	S
Other non-S&E occupations	52,000	57,000	S	40,000	38,000	S	S	S	S

KEY: S = Median based on fewer than 200 weighted cases--suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: All numbers in the table are estimates derived from a sample.
Median salaries were computed for full-time employed individuals only.

SOURCE: National Science Foundation/SRS, 1995 Survey of Doctorate Recipients

Table 40. Median annual salaries of doctoral scientists and engineers, by field of doctorate and sector of employment: 1995

Page 1 of 1

Field of doctorate	Total	Universities and 4-year colleges	Other educational institutions	Private-for-profit	Self-Employed	Private not-for-profit	Federal government	State & local government	Other sector
Total	$60,200	$52,300	$45,000	$75,000	$70,000	$60,000	$66,000	$50,000	$95,000
Sciences	60,000	51,000	45,000	75,000	68,000	59,000	65,000	50,000	92,000
Computer and mathematical sciences	60,000	53,300	46,000	76,800	55,000	80,000	69,000	S	S
Computer and information sciences	65,000	54,000	S	76,000	S	S	S	S	S
Mathematical sciences	60,000	53,000	46,000	78,000	70,000	80,000	69,000	S	S
Life and related sciences	57,000	51,600	42,000	72,000	50,000	58,000	62,000	50,000	63,000
Agricultural and food sciences	55,000	53,000	43,700	61,000	35,000	57,500	55,000	41,100	S
Biological and health sciences	57,700	51,300	42,000	75,000	52,000	58,700	63,000	50,000	71,500
Environmental sciences	55,900	51,500	S	72,000	S	S	64,000	50,000	S
Physical and related sciences	66,000	52,000	43,600	75,000	52,500	67,000	70,000	45,000	60,000
Chemistry, except biochemistry	68,000	49,000	45,000	75,000	60,000	64,000	66,000	50,900	S
Geology and oceanography	60,000	50,000	38,000	72,000	50,000	60,000	72,000	41,000	S
Physics and astronomy	68,000	55,400	45,000	77,000	50,000	70,000	72,000	S	S
Other physical sciences (incl. earth)	50,000	44,900	S	63,500	S	S	62,000	S	S
Social and related sciences	55,500	50,000	48,000	74,000	70,000	52,000	65,000	50,100	100,000
Economics	65,000	59,000	S	91,200	75,000	90,000	75,000	60,000	110,000
Political and related sciences	55,000	50,000	39,000	89,000	60,000	66,000	83,000	50,000	S
Psychology	56,000	49,000	50,000	70,000	75,000	51,000	61,600	51,000	S
Sociology and anthropology	50,000	50,000	39,000	60,000	40,000	50,000	59,600	42,000	S
Other social sciences	50,000	48,000	46,000	70,000	92,000	59,000	66,200	50,000	S
Engineering	70,000	61,900	37,000	75,000	80,000	75,500	70,000	50,000	S
Aerospace/aeronautical	72,000	70,000	S	72,000	85,000	S	70,000	S	S
Chemical	73,000	61,000	S	76,000	S	75,000	72,500	S	S
Civil	65,000	60,000	S	75,000	S	S	77,900	53,000	S
Electrical/computer	75,000	64,000	S	78,000		78,000	68,600	S	S
Industrial	60,000	56,400	S	70,000	S	S	S	S	S
Mechanical	67,000	57,800	S	70,000	S	72,000	68,000	S	S
Other engineering	69,500	63,500	S	73,000	75,000	80,000	68,000	50,000	S

KEY: S = Median based on fewer than 200 weighted cases--suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: All numbers in the table are estimates derived from a sample.
Median salaries were computed for full-time employed individuals only.

SOURCE: National Science Foundation/SRS, 1995 Survey of Doctorate Recipients

Table 41. Median annual salaries of doctoral scientists and engineers, by occupation and sector of employment: 1995

Page 1 of 1

Occupation	Total	Universities and 4-year colleges	Other educational institutions	Private-for-profit	Self-Employed	Private not-for-profit	Federal government	State & local gov't	Other sector
Total	$60,200	$52,300	$45,000	$75,000	$70,000	$60,000	$66,000	$50,000	$95,000
Scientists	55,000	50,000	45,000	70,000	70,000	55,000	61,000	50,000	82,000
Computer and mathematical scientists	60,000	51,000	46,500	70,000	65,000	76,000	65,000	48,000	S
Computer and information scientists	69,000	50,000	S	70,000	60,000	72,000	65,000	48,700	S
Mathematical scientists	66,000	51,000	S	72,000	S	76,400	63,000	S	S
Postsecondary teachers, computer and mathematical sciences	51,000	51,000	47,000	S	S	S	S	S	S
Life and related scientists	53,300	50,000	40,000	67,000	40,000	48,000	55,000	46,000	S
Agricultural scientists	54,000	50,000	S	62,000	35,000	S	61,000	S	S
Biological scientists	53,000	40,800	S	68,000	40,000	48,000	55,000	49,000	S
Forestry and conservation scientists	59,000	S	S	S	S	S	58,600	S	S
Postsecondary teachers, life and related sciences	53,800	54,200	40,000	S	S	S	S	S	S
Physical and related scientists	60,000	50,000	44,000	70,000	50,000	63,100	66,000	41,300	S
Chemists, except biochemists	65,000	35,500	S	69,000	S	64,000	61,000	41,300	S
Earth scientists	65,000	50,000	S	73,000	50,000	63,000	70,800	41,000	S
Physicists and astronomers	64,400	50,000	S	74,000	S	62,000	65,100	S	S
Other physical scientists	65,000	50,000	S	70,000	S	S	S	S	S
Postsecondary teachers, physical and related sciences	50,000	50,000	44,000	S	S	S	S	S	S
Social and related scientists	53,000	49,200	46,000	67,000	75,000	50,000	60,800	50,000	92,000
Economists	75,000	56,000	S	77,000	S	79,300	68,000	S	100,000
Political scientists	60,000	50,000	S	S	S	S	75,300	S	S
Psychologists	58,000	45,000	48,000	65,000	75,000	48,000	59,000	50,000	S
Sociologists and anthropologists	52,000	55,000	S	75,000	45,000	60,000	52,000	41,400	S
S&T historians and other social scientists	53,000	53,000	S	53,000	S	50,000	72,000	41,000	S
Postsecondary teachers, social and related sciences	49,000	49,400	40,000	S	S	S	S	S	S
Engineers	67,000	60,000	S	70,000	80,000	70,000	65,900	49,000	S
Aerospace and related engineers	70,000	72,400	S	70,000	S	67,000	70,000	S	S
Chemical engineers	70,000	60,000	S	70,000	S	S	S	S	S
Civil and architectural engineers	60,800	60,000	S	65,000	85,000	S	67,500	50,500	S
Electric and related engineers	72,000	60,000	S	73,000	104,000	78,000	65,000	S	S
Industrial engineers	66,300	50,000	S	67,000	S	S	S	S	S
Mechanical engineers	66,300	61,000	S	67,000	S	S	67,000	S	S
Other engineers	67,000	55,000	S	70,000	65,000	70,000	64,200	50,000	S
Postsecondary teachers, engineering	60,000	60,000	S	S	S	S	S	S	S
Non-S&E occupations	73,500	62,000	46,000	89,500	60,000	67,000	79,000	53,000	100,000
Managers, administrators, etc.	84,800	76,000	62,700	95,000	60,000	73,500	82,000	57,000	120,000
Health and related occupations	65,000	49,000	S	100,000	90,000	60,000	60,000	40,000	S
Teachers, except S&E postsecondary teachers	50,000	50,000	40,500	S	S	S	S	S	S
Social services and related occupations	38,000	S	44,000	S	S	32,000	S	32,000	S
Technologists, etc.	62,000	45,000	S	64,000	65,000	S	52,000	S	S
Sales and marketing occupations	67,000	S	S	68,000	60,000	S	S	S	S
Other non-S&E occupations	52,000	45,000	S	60,000	45,000	45,000	66,000	46,000	S

KEY: S = Median based on fewer than 200 weighted cases--suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: All numbers in the table are estimates derived from a sample.
Median salaries were computed for full-time employed individuals only.

SOURCE: National Science Foundation/SRS, 1995 Survey of Doctorate Recipients

Table 42. Median annual salaries of doctoral scientists and engineers, by field of doctorate and primary work activity: 1995

Page 1 of 1

Field of doctorate	Total	R&D	Teaching	Management, sales, and administration	Computer applications	Other
Total	$60,200	$63,000	$50,000	$79,000	$64,000	$60,000
Sciences	60,000	60,400	48,000	75,000	64,000	60,000
Computer and mathematical sciences	60,000	67,000	50,000	84,000	70,000	74,000
Computer and information sciences	65,000	70,000	50,000	84,100	68,000	S
Mathematical sciences	60,000	65,400	50,000	84,000	70,000	69,000
Life and related sciences	57,000	56,700	48,200	72,000	50,000	61,400
Agricultural and food sciences	55,000	55,000	49,000	65,000	52,000	54,000
Biological and health sciences	57,700	57,100	48,000	74,000	50,000	65,000
Environmental sciences	55,900	57,000	48,200	73,000	S	55,000
Physical and related sciences	66,000	66,000	48,900	84,000	66,000	73,600
Chemistry, except biochemistry	68,000	67,300	45,000	84,000	65,000	75,000
Geology and oceanography	60,000	63,000	50,000	78,000	55,000	50,000
Physics and astronomy	68,000	66,800	51,000	90,000	70,000	80,000
Other physical sciences (incl. earth)	50,000	49,100	41,000	S	S	S
Social and related sciences	55,500	60,000	48,000	70,000	60,000	59,000
Economics	65,000	68,400	53,000	90,000	75,000	90,000
Political and related sciences	55,000	57,500	46,200	76,100	50,000	75,000
Psychology	56,000	58,000	46,000	63,000	65,000	58,800
Sociology and anthropology	50,000	52,000	45,000	65,000	45,000	47,000
Other social sciences	50,000	60,000	45,000	70,000	60,200	50,000
Engineering	70,000	69,000	60,000	91,000	65,000	75,000
Aerospace/aeronautical	72,000	67,400	67,000	98,000	68,200	S
Chemical	73,000	70,000	57,000	94,000	70,000	80,000
Civil	65,000	60,800	60,000	96,800	60,000	75,000
Electrical/computer	75,000	72,000	57,400	95,000	67,000	80,000
Industrial	60,000	65,700	56,000	86,000	60,000	S
Mechanical	67,000	67,500	52,000	92,400	61,000	56,500
Other engineering	69,500	67,200	62,000	86,000	62,000	75,000

KEY: S = Median based on fewer than 200 weighted cases--suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: All numbers in the table are estimates derived from a sample.
Median salaries were computed for full-time employed individuals only.

SOURCE: National Science Foundation/SRS, 1995 Survey of Doctorate Recipients

Table 43. Median annual salaries of doctoral scientists and engineers, by occupation and primary work activity: 1995

Page 1 of 1

Occupation	Total	R&D	Teaching	Management, sales, and administration	Computer applications	Other
Total	$60,200	$63,000	$50,000	$79,000	$64,000	$60,000
Scientists	55,000	60,000	48,300	64,000	65,000	60,000
Computer and mathematical scientists	60,000	66,000	50,000	69,000	65,000	65,000
Computer and information scientists	69,000	72,600	S	72,000	65,000	70,000
Mathematical scientists	66,000	68,000	S	70,000	62,500	60,000
Postsecondary teachers, computer and mathematical sciences	51,000	55,000	50,000	S	S	S
Life and related scientists	53,300	54,500	48,800	60,000	45,000	61,000
Agricultural scientists	54,000	54,000	S	60,000	S	54,000
Biological scientists	53,000	51,300	S	60,000	45,000	61,000
Forestry and conservation scientists	59,000	60,000	S	S	S	S
Postsecondary teachers, life and related sciences	53,800	60,000	48,700	60,700	S	82,000
Physical and related scientists	60,000	64,000	48,000	70,500	67,200	65,000
Chemists, except biochemists	65,000	65,000	S	70,000	65,000	60,000
Earth scientists	65,000	64,900	S	79,900	61,000	65,000
Physicists and astronomers	64,400	61,600	S	70,000	71,000	76,000
Other physical scientists	65,000	63,900	S	S	S	65,000
Postsecondary teachers, physical and related sciences	50,000	57,000	48,000	58,000	S	52,000
Social and related scientists	53,000	57,000	47,800	60,000	53,700	59,000
Economists	75,000	72,000	S	80,000	S	80,000
Political scientists	60,000	60,000	S	S	S	63,200
Psychologists	58,000	55,000	S	59,000	S	59,000
Sociologists and anthropologists	52,000	54,000	S	S	S	46,000
S&T historians and other social scientists	53,000	53,000	S	S	S	58,400
Postsecondary teachers, social and related sciences	49,000	54,100	48,000	64,000	S	53,000
Engineers	67,000	67,900	60,000	74,000	65,000	75,000
Aerospace and related engineers	70,000	70,000	S	75,000	72,000	S
Chemical engineers	70,000	69,200	S	73,000	70,000	S
Civil and architectural engineers	60,800	60,000	S	75,000	S	85,600
Electric and related engineers	72,000	72,000	S	90,000	68,600	80,000
Industrial engineers	66,300	60,000	S	S	S	S
Mechanical engineers	66,300	67,000	S	72,600	63,100	75,000
Other engineers	67,000	67,700	S	65,000	65,000	68,000
Postsecondary teachers, engineering	60,000	60,000	60,000	78,000	S	S
Non-S&E occupations	73,500	77,000	49,000	83,000	63,000	64,600
Managers, administrators, etc.	84,800	85,000	56,000	85,000	78,000	78,000
Health and related occupations	65,000	69,000	S	55,000	S	65,000
Teachers, except S&E postsecondary teachers	50,000	59,900	48,000	64,000	S	53,000
Social services and related occupations	38,000	S	S	S	S	36,000
Technologists, etc.	62,000	63,000	S	59,100	61,000	60,000
Sales and marketing occupations	67,000	85,000	S	65,000	S	70,000
Other non-S&E occupations	52,000	52,000	65,200	50,000	46,000	54,000

KEY: S = Median based on fewer than 200 weighted cases--suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: All numbers in the table are estimates derived from a sample.
Median salaries were computed for full-time employed individuals only.

SOURCE: National Science Foundation/SRS, 1995 Survey of Doctorate Recipients

Table 44. Median annual salaries of doctoral scientists and engineers, by sector of employment, broad field of doctorate, and sex: 1995

Page 1 of 2

Sector/field of doctorate	Total	Male	Female
All sectors:			
Total	$60,200	$65,000	$50,000
Sciences	60,000	62,000	50,000
Computer and mathematical sciences	60,000	61,000	53,000
Life and related sciences	57,000	60,000	49,000
Physical and related sciences	66,000	68,000	56,000
Social and related sciences	55,500	60,000	50,000
Engineering	70,000	70,000	58,200
Universities and 4-year colleges:			
Total	52,300	55,000	44,000
Sciences	51,000	54,000	44,000
Computer and mathematical sciences	53,300	54,500	47,000
Life and related sciences	51,600	55,000	44,000
Physical and related sciences	52,000	54,000	39,800
Social and related sciences	50,000	54,000	44,700
Engineering	61,900	63,000	52,000
Other educational institutions:			
Total	45,000	47,000	43,000
Sciences	45,000	48,000	43,000
Computer and mathematical sciences	46,000	46,000	46,000
Life and related sciences	42,000	45,000	39,000
Physical and related sciences	43,600	45,000	41,700
Social and related sciences	48,000	52,000	45,000
Engineering	37,000	37,000	S
Private-for-profit:			
Total	75,000	75,000	64,500
Sciences	75,000	75,000	65,000
Computer and mathematical sciences	76,800	76,800	78,000
Life and related sciences	72,000	75,000	65,000
Physical and related sciences	75,000	75,000	65,000
Social and related sciences	74,000	76,100	60,000
Engineering	75,000	75,000	63,000
Self-employed:			
Total	70,000	72,000	61,000
Sciences	68,000	70,000	60,000
Computer and mathematical sciences	55,000	70,000	S
Life and related sciences	50,000	55,000	48,500
Physical and related sciences	52,500	50,000	S
Social and related sciences	70,000	75,000	65,000
Engineering	80,000	80,000	S

See explanatory information and SOURCE at end of table.

Table 44. Median annual salaries of doctoral scientists and engineers, by sector of employment, broad field of doctorate, and sex: 1995

Page 2 of 2

Sector/field of doctorate	Total	Male	Female
Private not-for-profit:			
Total	$60,000	$64,000	$50,000
Sciences	59,000	62,500	50,000
Computer and mathematical sciences	80,000	82,000	S
Life and related sciences	58,000	60,000	51,000
Physical and related sciences	67,000	67,200	59,300
Social and related sciences	52,000	59,000	47,000
Engineering	75,500	75,500	S
Federal government:			
Total	66,000	67,000	60,000
Sciences	65,000	66,400	60,000
Computer and mathematical sciences	69,000	66,000	S
Life and related sciences	62,000	64,400	55,000
Physical and related sciences	70,000	72,000	60,000
Social and related sciences	65,000	65,500	63,300
Engineering	70,000	70,000	63,000
State and local government:			
Total	50,000	51,000	49,500
Sciences	50,000	51,000	49,500
Computer and mathematical sciences	S	S	S
Life and related sciences	50,000	50,000	50,000
Physical and related sciences	45,000	45,000	S
Social and related sciences	50,100	53,000	48,000
Engineering	50,000	50,000	S
Other sector:			
Total	95,000	95,000	56,000
Sciences	92,000	97,000	60,000
Computer and mathematical sciences	S	S	S
Life and related sciences	63,000	100,000	S
Physical and related sciences	60,000	60,000	S
Social and related sciences	100,000	101,000	80,000
Engineering	S	S	S

KEY: S = Median based on fewer than 200 weighted cases--suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: All numbers in the table are estimates derived from a sample.
Median salaries were computed for full-time employed individuals only.

SOURCE: National Science Foundation/SRS, 1995 Survey of Doctorate Recipients

Table 45. Median annual salaries of doctoral scientists and engineers, by sector of employment, broad occupation, and sex: 1995

Page 1 of 2

Sector/occupation	Total	Male	Female
All sectors:			
Total	$60,200	$65,000	$50,000
Scientists	55,000	59,000	47,000
Computer and mathematical scientists	60,000	60,000	51,300
Life and related scientists	53,300	56,000	44,000
Physical and related scientists	60,000	61,000	52,000
Social and related scientists	53,000	56,000	47,500
Engineers	67,000	67,000	58,300
Non-S&E occupations	73,500	79,000	55,000
Universities and 4-year colleges:			
Total	52,300	55,000	44,000
Scientists	50,000	52,000	41,500
Computer and mathematical scientists	51,000	52,000	45,000
Life and related scientists	50,000	53,000	40,000
Physical and related scientists	50,000	50,500	40,000
Social and related scientists	49,200	51,000	42,500
Engineers	60,000	60,000	52,000
Non-S&E occupations	62,000	69,000	50,000
Other educational institutions:			
Total	45,000	47,000	43,000
Scientists	45,000	47,000	40,000
Computer and mathematical scientists	46,500	43,000	S
Life and related scientists	40,000	43,700	38,000
Physical and related scientists	44,000	45,000	S
Social and related scientists	46,000	50,000	43,000
Engineers	S	S	S
Non-S&E occupations	46,000	50,000	44,000
Private-for-profit:			
Total	75,000	75,000	64,500
Scientists	70,000	70,000	62,000
Computer and mathematical scientists	70,000	70,000	68,000
Life and related scientists	67,000	70,000	63,000
Physical and related scientists	70,000	71,500	62,000
Social and related scientists	67,000	75,000	60,000
Engineers	70,000	70,000	63,000
Non-S&E occupations	89,500	90,000	72,000
Self-employed:			
Total	70,000	72,000	61,000
Scientists	70,000	75,000	64,000
Computer and mathematical scientists	65,000	65,000	S
Life and related scientists	40,000	40,000	S
Physical and related scientists	50,000	50,000	S
Social and related scientists	75,000	80,000	65,000
Engineers	80,000	80,000	S
Non-S&E occupations	60,000	60,000	60,000

See explanatory information and SOURCE at end of table.

Table 45. Median annual salaries of doctoral scientists and engineers, by sector of employment, broad occupation, and sex: 1995

Page 2 of 2

Sector/occupation	Total	Male	Female
Private not-for-profit:			
Total	$60,000	$64,000	$50,000
Scientists	55,000	59,000	45,000
Computer and mathematical scientists	76,000	76,500	S
Life and related scientists	48,000	52,000	36,000
Physical and related scientists	63,100	64,000	59,500
Social and related scientists	50,000	54,000	45,000
Engineers	70,000	70,000	S
Non-S&E occupations	67,000	72,000	54,000
Federal government:			
Total	66,000	67,000	60,000
Scientists	61,000	62,500	56,000
Computer and mathematical scientists	65,000	65,000	S
Life and related scientists	55,000	58,000	51,000
Physical and related scientists	66,000	67,000	58,400
Social and related scientists	60,800	61,000	60,000
Engineers	65,900	67,000	S
Non-S&E occupations	79,000	80,000	70,000
State and local government:			
Total	50,000	51,000	49,500
Scientists	50,000	50,000	48,000
Computer and mathematical scientists	48,000	48,000	S
Life and related scientists	46,000	49,000	S
Physical and related scientists	41,300	41,800	S
Social and related scientists	50,000	51,000	48,600
Engineers	49,000	49,000	S
Non-S&E occupations	53,000	54,900	50,000
Other sector:			
Total	95,000	95,000	56,000
Scientists	82,000	90,000	58,000
Computer and mathematical scientists	S	S	S
Life and related scientists	S	S	S
Physical and related scientists	S	S	S
Social and related scientists	92,000	99,000	84,500
Engineers	S	S	S
Non-S&E occupations	100,000	105,000	S

KEY: S = Median based on fewer than 200 weighted cases--suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: All numbers in the table are estimates derived from a sample.
Median salaries were computed for full-time employed individuals only.

SOURCE: National Science Foundation/SRS, 1995 Survey of Doctorate Recipients

Table 46. Median annual salaries of doctoral scientists and engineers, by sector of employment, broad field of doctorate, and race/ethnicity: 1995

Page 1 of 2

Sector/field of doctorate	Total	White	Black	Asian or Pacific Islander	Hispanic	Native American
All sectors:						
Total	$60,200	$62,000	$55,000	$60,000	$54,400	$52,000
Sciences	60,000	60,000	53,000	53,300	52,000	50,000
Computer and mathematical sciences	60,000	62,000	57,000	55,000	49,900	S
Life and related sciences	57,000	58,000	51,000	49,000	52,500	56,000
Physical and related sciences	66,000	68,500	59,000	60,000	60,200	73,000
Social and related sciences	55,500	56,000	52,300	50,900	48,500	46,000
Engineering	70,000	72,200	65,900	65,600	62,900	S
Universities and 4-year colleges:						
Total	52,300	54,000	50,000	45,000	47,800	48,000
Sciences	51,000	52,300	48,000	42,000	45,000	46,200
Computer and mathematical sciences	53,300	55,000	50,000	48,600	46,200	S
Life and related sciences	51,600	52,500	48,000	40,000	45,000	49,200
Physical and related sciences	52,000	54,000	47,300	40,000	50,500	S
Social and related sciences	50,000	50,900	48,000	46,900	43,000	46,000
Engineering	61,900	65,000	63,500	54,000	53,300	S
Other educational institutions:						
Total	45,000	45,000	50,000	40,000	45,500	S
Sciences	45,000	45,400	50,000	40,000	45,000	S
Computer and mathematical sciences	46,000	47,000	S	S	S	S
Life and related sciences	42,000	43,000	S	S	S	S
Physical and related sciences	43,600	43,600	S	S	S	S
Social and related sciences	48,000	48,000	50,000	S	S	S
Engineering	37,000	37,000	S	S	S	S
Private-for-profit:						
Total	75,000	76,000	66,000	68,500	70,000	67,000
Sciences	75,000	75,000	65,000	67,500	67,000	73,500
Computer and mathematical sciences	76,800	80,000	S	71,000	S	S
Life and related sciences	72,000	74,000	68,000	65,000	67,000	S
Physical and related sciences	75,000	76,500	65,000	67,900	69,800	S
Social and related sciences	74,000	75,000	65,000	66,000	60,000	S
Engineering	75,000	78,000	70,000	70,000	72,000	S
Self-employed:						
Total	70,000	70,000	75,000	75,000	35,000	S
Sciences	68,000	67,000	75,000	70,000	35,000	S
Computer and mathematical sciences	55,000	52,000	S	S	S	S
Life and related sciences	50,000	50,000	S	S	S	S
Physical and related sciences	52,500	55,000	S	S	S	S
Social and related sciences	70,000	70,000	75,000	75,000	75,000	S
Engineering	80,000	84,000	S	80,000	S	S

See explanatory information and SOURCE at end of table.

Table 46. Median annual salaries of doctoral scientists and engineers, by sector of employment, broad field of doctorate, and race ethnicity: 1995

Page 2 of 2

Sector/field of doctorate	Total	White	Black	Asian or Pacific Islander	Hispanic	Native American
Private not-for-profit:						
Total	$60,000	$60,000	$52,000	$56,000	$57,000	S
Sciences	59,000	60,000	52,000	47,500	57,000	S
Computer and mathematical sciences	80,000	80,000	S	S	S	S
Life and related sciences	58,000	60,000	S	36,000	S	S
Physical and related sciences	67,000	68,000	S	59,000	S	S
Social and related sciences	52,000	52,100	52,000	47,000	57,000	S
Engineering	75,500	80,300	S	62,000	S	S
Federal government:						
Total	66,000	67,000	60,000	60,000	62,000	S
Sciences	65,000	66,000	60,000	60,000	61,900	S
Computer and mathematical sciences	69,000	69,000	S	S	S	S
Life and related sciences	62,000	63,000	60,000	51,000	S	S
Physical and related sciences	70,000	72,000	S	60,000	S	S
Social and related sciences	65,000	65,500	60,000	65,000	60,000	S
Engineering	70,000	71,900	S	65,000	S	S
State and local government:						
Total	50,000	50,000	48,000	45,000	S	S
Sciences	50,000	50,000	48,000	44,000	S	S
Computer and mathematical sciences	S	S	S	S	S	S
Life and related sciences	50,000	50,000	S	45,000	S	S
Physical and related sciences	45,000	46,000	S	S	S	S
Social and related sciences	50,100	51,000	50,000	44,000	S	S
Engineering	50,000	54,000	S	47,000	S	S
Other sector:						
Total	95,000	92,000	S	90,000	S	S
Sciences	92,000	90,000	S	82,000	S	S
Computer and mathematical sciences	S	S	S	S	S	S
Life and related sciences	63,000	78,000	S	S	S	S
Physical and related sciences	60,000	60,000	S	S	S	S
Social and related sciences	100,000	100,000	S	95,000	S	S
Engineering	S	S	S	S	S	S

KEY: S = Median based on fewer than 200 weighted cases--suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: All numbers in the table are estimates derived from a sample.
Median salaries were computed for full-time employed individuals only.

SOURCE: National Science Foundation/SRS, 1995 Survey of Doctorate Recipients

Table 47. Median annual salaries of doctoral scientists and engineers, by sector of employment, broad occupation, and race ethnicity: 1995

Page 1 of 2

Sector/occupation	Total	White	Black	Asian or Pacific Islander	Hispanic	Native American
All sectors:						
Total	$60,200	$62,000	$55,000	$60,000	$54,400	$52,000
Scientists	55,000	56,300	50,000	50,900	49,200	50,000
Computer and mathematical scientists	60,000	60,000	55,000	60,000	48,000	S
Life and related scientists	53,300	55,000	46,000	42,000	44,700	59,900
Physical and related scientists	60,000	61,000	53,300	53,000	55,000	S
Social and related scientists	53,000	54,000	50,000	50,000	46,000	48,000
Engineers	67,000	68,600	65,000	64,000	57,000	S
Non-S&E occupations	73,500	75,000	60,000	72,000	70,000	50,000
Universities and 4-year colleges:						
Total	52,300	54,000	50,000	45,000	47,800	48,000
Scientists	50,000	50,900	45,000	42,000	44,000	46,200
Computer and mathematical scientists	51,000	52,600	52,000	47,500	45,000	S
Life and related scientists	50,000	52,000	44,500	35,000	42,000	S
Physical and related scientists	50,000	50,400	40,000	40,000	49,500	S
Social and related scientists	49,200	50,000	46,000	47,000	43,000	45,500
Engineers	60,000	61,200	64,000	54,000	53,300	S
Non-S&E occupations	62,000	63,000	57,000	52,300	57,000	S
Other educational institutions:						
Total	45,000	45,000	50,000	40,000	45,500	S
Scientists	45,000	45,000	38,000	40,000	48,000	S
Computer and mathematical scientists	46,500	50,200	S	S	S	S
Life and related scientists	40,000	40,000	S	S	S	S
Physical and related scientists	44,000	43,600	S	S	S	S
Social and related scientists	46,000	46,000	S	S	S	S
Engineers	S	S	S	S	S	S
Non-S&E occupations	46,000	46,000	56,000	S	S	S
Private-for-profit:						
Total	75,000	76,000	66,000	68,500	70,000	67,000
Scientists	70,000	70,000	65,000	65,000	61,000	S
Computer and mathematical scientists	70,000	72,000	S	66,900	68,000	S
Life and related scientists	67,000	69,000	S	62,000	62,000	S
Physical and related scientists	70,000	72,000	68,000	64,000	62,000	S
Social and related scientists	67,000	70,000	60,000	70,000	60,000	S
Engineers	70,000	73,000	66,000	67,000	70,000	S
Non-S&E occupations	89,500	90,000	82,000	80,000	82,000	S
Self-employed:						
Total	70,000	70,000	75,000	75,000	35,000	S
Scientists	70,000	70,000	75,000	S	S	S
Computer and mathematical scientists	65,000	70,000	S	S	S	S
Life and related scientists	40,000	40,000	S	S	S	S
Physical and related scientists	50,000	50,000	S	S	S	S
Social and related scientists	75,000	75,000	75,000	S	S	S
Engineers	80,000	80,000	S	80,000	S	S
Non-S&E occupations	60,000	60,000	S	70,000	S	S

See explanatory information and SOURCE at end of table.

Table 47. Median annual salaries of doctoral scientists and engineers, by sector of employment, broad occupation, and race/ethnicity: 1995

Page 2 of 2

Sector/occupation	Total	White	Black	Asian or Pacific Islander	Hispanic	Native American
Private not-for-profit:						
Total	$60,000	$60,000	$52,000	$56,000	$57,000	S
Scientists	55,000	56,000	38,000	44,500	45,000	S
Computer and mathematical scientists	76,000	76,400	S	S	S	S
Life and related scientists	48,000	50,000	S	35,000	S	S
Physical and related scientists	63,100	65,000	S	44,500	S	S
Social and related scientists	50,000	50,000	S	S	46,000	S
Engineers	70,000	80,000	S	60,000	S	S
Non-S&E occupations	67,000	65,000	70,000	70,000	84,000	S
Federal government:						
Total	66,000	67,000	60,000	60,000	62,000	S
Scientists	61,000	62,000	56,700	58,400	59,000	S
Computer and mathematical scientists	65,000	63,000	S	65,000	S	S
Life and related scientists	55,000	56,700	S	48,000	S	S
Physical and related scientists	66,000	66,900	S	61,900	S	S
Social and related scientists	60,800	61,300	S	S	58,000	S
Engineers	65,900	67,300	S	61,000	S	S
Non-S&E occupations	79,000	80,000	65,900	71,600	75,000	S
State and local government:						
Total	50,000	50,000	48,000	45,000	S	S
Scientists	50,000	50,000	S	44,000	S	S
Computer and mathematical scientists	48,000	48,700	S	S	S	S
Life and related scientists	46,000	49,000	S	S	S	S
Physical and related scientists	41,300	42,000	S	S	S	S
Social and related scientists	50,000	50,000	S	52,800	S	S
Engineers	49,000	50,000	S	S	S	S
Non-S&E occupations	53,000	54,000	52,000	45,000	S	S
Other sector:						
Total	95,000	92,000	S	90,000	S	S
Scientists	82,000	90,000	S	40,000	S	S
Computer and mathematical scientists	S	S	S	S	S	S
Life and related scientists	S	S	S	S	S	S
Physical and related scientists	S	S	S	S	S	S
Social and related scientists	92,000	95,000	S	S	S	S
Engineers	S	S	S	S	S	S
Non-S&E occupations	100,000	100,000	S	95,000	S	S

KEY: S = Median based on fewer than 200 weighted cases--suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: All numbers in the table are estimates derived from a sample.
Median salaries were computed for full-time employed individuals only.

SOURCE: National Science Foundation/SRS, 1995 Survey of Doctorate Recipients

Table 48. Median annual salaries of doctoral scientists and engineers, by demographic characteristics, race ethnicity, and sex: 1995

Page 1 of 2

Characteristics	Total			White			Black		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total	$60,200	$65,000	$50,000	$62,000	$65,000	$50,000	$55,000	$57,000	$51,000
Age:									
Under 30	40,000	42,000	35,000	38,000	42,000	33,200	S	S	S
30-34	47,000	50,000	38,000	47,000	50,000	37,000	50,500	53,500	47,000
35-39	53,800	55,900	46,000	54,000	56,900	46,000	50,000	49,700	56,000
40-44	60,000	63,000	52,000	60,000	63,000	52,000	52,000	52,500	50,800
45-49	66,000	70,000	55,200	66,000	70,000	56,000	60,000	65,000	52,000
50-54	70,000	73,600	55,000	71,100	75,000	55,000	60,000	61,000	57,000
55-59	70,000	73,400	55,000	71,000	74,000	55,000	63,000	66,000	S
60-64	70,000	70,500	53,000	70,000	71,500	52,500	59,500	60,000	S
65-75	65,000	65,000	50,500	65,000	66,800	55,000	50,000	50,000	S
Citizenship status:									
U.S. total	62,000	65,300	50,000	62,000	65,000	50,000	57,000	60,000	52,000
U.S. native	61,000	65,000	50,000	62,000	65,000	50,000	57,000	60,000	52,000
U.S. naturalized	68,000	70,000	53,000	68,000	70,000	52,000	59,000	59,000	50,000
Non-U.S. total	50,000	51,000	40,000	54,800	56,000	42,200	45,000	45,600	S
Non-U.S., permanent resident	51,000	53,000	42,000	56,000	58,500	44,000	50,000	50,000	S
Non-U.S., temporary resident	40,000	41,000	33,200	43,000	45,000	36,000	31,000	30,400	S
Geographic division:									
New England	60,000	65,000	48,000	60,000	65,000	50,000	55,300	52,000	S
Middle Atlantic	65,000	69,200	53,000	65,000	70,000	53,000	62,000	65,000	54,000
East North Central	60,000	63,000	48,000	60,000	65,000	48,000	56,000	60,000	52,000
West North Central	55,000	56,000	46,000	55,000	57,500	46,000	47,300	47,300	S
South Atlantic	62,000	65,000	51,000	64,000	67,700	51,000	52,500	55,000	51,200
East South Central	56,000	59,000	49,000	58,200	60,000	50,000	44,000	47,000	S
West South Central	60,000	61,000	47,000	60,000	63,000	48,000	48,000	50,000	43,500
Mountain	59,200	60,000	45,000	60,000	62,000	46,700	50,000	S	S
Pacific	63,800	67,000	52,000	64,000	67,400	53,000	60,000	70,000	56,000
Other U.S.	50,000	50,000	S	50,000	50,000	S	S	S	S
Place of birth:									
U.S.	61,000	65,000	50,000	62,000	65,000	50,000	57,000	60,000	52,000
Europe	62,000	65,000	48,000	62,200	65,700	48,800	S	S	S
Asia	60,000	60,600	48,000	60,000	60,000	50,000	S	S	S
North America	65,000	68,000	55,000	65,000	68,500	55,000	S	S	S
Central America	55,000	55,000	S	S	S	S	S	S	S
Carribean	60,000	65,000	45,000	S	S	S	60,000	60,000	S
South America	57,000	60,000	50,500	64,000	68,000	59,000	S	S	S
Africa	55,000	56,000	43,000	62,000	64,000	40,000	50,000	50,000	S
Oceania	72,000	72,000	S	72,000	72,000	S	S	S	S
Unknown	66,600	66,600	S	66,600	66,600	S	S	S	S

See explanatory information and SOURCE at end of table.

Table 48. Median annual salaries of doctoral scientists and engineers, by demographic characteristics, race ethnicity, and sex: 1995

Page 2 of 2

Characteristics	Asian or Pacific Islander			Hispanic			Native American		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total	$60,000	$61,000	$48,000	$54,400	$58,000	$42,000	$52,000	$52,000	$49,000
Age:									
Under 30	43,000	47,000	34,000	41,000	S	S	S	S	S
30-34	47,500	50,000	40,000	46,000	52,000	38,800	S	S	S
35-39	53,000	55,000	45,000	48,000	51,000	40,000	48,000	S	S
40-44	63,000	64,000	55,000	53,300	55,000	44,500	S	S	S
45-49	70,000	71,000	57,000	60,000	61,000	43,000	50,000	S	48,000
50-54	71,000	72,000	59,000	63,000	67,400	48,000	60,000	60,000	S
55-59	72,000	73,000	50,000	72,000	72,400	S	46,500	S	S
60-64	70,000	71,000	S	67,000	70,000	S	S	S	S
65-75	61,000	61,000	S	S	S	S	S	S	S
Citizenship status:									
U.S. total	68,000	70,000	55,000	55,000	60,000	43,000	52,000	54,000	49,000
U.S. native	60,000	64,000	50,000	54,000	59,000	42,900	52,000	53,000	48,500
U.S. naturalized	70,000	70,700	55,000	61,000	64,000	44,000	S	S	S
Non-U.S. total	48,700	50,000	40,000	50,000	51,000	39,900	S	S	S
Non-U.S., permanent resident	50,000	50,100	41,500	51,000	51,000	47,000	S	S	S
Non-U.S., temporary resident	40,000	40,000	30,000	37,000	41,000	S	S	S	S
Geographic division:									
New England	55,000	63,000	36,500	60,000	62,000	S	S	S	S
Middle Atlantic	65,000	67,000	53,000	59,000	60,000	54,100	S	S	S
East North Central	56,000	58,400	48,000	55,000	58,900	45,000	46,000	S	S
West North Central	50,000	51,000	48,000	53,300	55,000	S	S	S	S
South Atlantic	57,000	58,000	50,000	56,000	59,000	44,000	65,000	S	S
East South Central	50,000	50,000	42,000	55,500	57,800	S	48,000	S	S
West South Central	58,000	60,000	45,000	52,000	56,000	40,000	46,500	46,500	S
Mountain	53,000	55,000	35,000	49,800	50,000	S	S	S	S
Pacific	65,000	67,500	50,700	50,000	55,000	40,000	50,000	S	S
Other U.S.	50,000	48,000	S	S	S	S	S	S	S
Place of birth:									
U.S.	60,000	65,000	49,500	53,000	58,000	42,000	52,000	53,000	48,500
Europe	57,000	S	S	49,200	53,000	S	S	S	S
Asia	60,000	61,000	48,000	S	S	S	S	S	S
North America	S	S	S	S	S	S	S	S	S
Central America	S	S	S	55,000	55,000	S	S	S	S
Carribean	S	S	S	66,000	72,000	S	S	S	S
South America	S	S	S	55,000	57,000	47,800	S	S	S
Africa	52,000	S	S	S	S	S	S	S	S
Oceania	S	S	S	S	S	S	S	S	S
Unknown	S	S	S	S	S	S	S	S	S

KEY: S = Median based on fewer than 200 weighted cases--suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: All numbers in the table are estimates derived from a sample.
Median salaries were computed for full-time employed individuals only.

SOURCE: National Science Foundation/SRS, 1995 Survey of Doctorate Recipients

Table 49. Median annual salaries of doctoral scientists and engineers, by demographic characteristics and citizenship status: 1995

Page 1 of 2

Characteristics	Total	U.S. Citizen			Non-U.S. Citizen		
		Total	Native	Naturalized	Total	Permanent resident	Temporary resident
Total	$60,200	$62,000	$61,000	$68,000	$50,000	$51,000	$40,000
Sex:							
Men	65,000	65,300	65,000	70,000	51,000	53,000	41,000
Women	50,000	50,000	50,000	53,000	40,000	42,000	33,200
Race/Ethnicity:							
White	62,000	62,000	62,000	68,000	54,800	56,000	43,000
Black	55,000	57,000	57,000	59,000	45,000	50,000	31,000
Asian or Pacific Islander	60,000	68,000	60,000	70,000	48,700	50,000	40,000
Hispanic	54,400	55,000	54,000	61,000	50,000	51,000	37,000
Native American	52,000	52,000	52,000	S	S	S	S
Age:							
Under 30	40,000	38,000	39,000	35,000	43,000	44,800	43,000
30-34	47,000	47,000	46,000	52,600	47,500	50,000	40,000
35-39	53,800	55,000	54,000	61,000	49,600	50,000	39,000
40-44	60,000	60,000	60,000	66,000	53,000	54,000	40,000
45-49	66,000	67,000	66,000	70,000	50,000	50,000	S
50-54	70,000	70,400	70,000	72,000	60,300	65,000	S
55-59	70,000	71,000	70,000	73,500	62,000	60,000	S
60-64	70,000	70,000	69,000	75,000	52,300	52,300	S
65-75	65,000	65,000	65,000	66,000	57,000	57,000	S
Geographic division:							
New England	60,000	62,000	60,000	69,000	45,000	45,000	40,000
Middle Atlantic	65,000	67,000	65,000	73,400	55,000	56,000	40,000
East North Central	60,000	61,000	60,000	67,000	50,000	51,000	40,000
West North Central	55,000	55,000	55,000	60,000	42,000	43,000	37,500
South Atlantic	62,000	63,500	63,900	63,000	48,000	49,000	41,000
East South Central	56,000	58,000	58,000	60,000	40,000	40,200	34,000
West South Central	60,000	60,000	60,000	69,200	47,500	50,000	43,000
Mountain	59,200	60,000	60,000	60,000	48,000	50,000	40,000
Pacific	63,800	65,000	63,000	70,000	56,000	58,000	40,000
Other U.S.	50,000	50,000	48,000	55,000	36,000	S	30,000
Field of doctorate:							
Sciences	60,000	60,000	60,000	64,000	45,000	48,000	36,700
Computer and mathematical sciences	60,000	62,500	63,000	60,000	50,000	51,700	41,000
Computer and information sciences	65,000	66,000	66,000	67,000	60,000	60,000	60,000
Mathematical sciences	60,000	61,000	62,000	60,000	42,000	44,000	38,000
Life and related sciences	57,000	58,400	58,000	60,300	37,300	40,000	28,000
Agricultural and food sciences	55,000	57,000	57,000	55,000	38,000	42,000	27,000
Biological and health sciences	57,700	59,000	58,000	62,000	36,000	40,000	28,000
Environmental sciences	55,900	56,000	56,000	65,000	S	S	S

See explanatory information and SOURCE at end of table.

Table 49. Median annual salaries of doctoral scientists and engineers, by demographic characteristics and citizenship status: 1995

Page 2 of 2

Characteristics	Total	U.S. Citizen			Non-U.S. Citizen		
		Total	Native	Naturalized	Total	Permanent resident	Temporary resident
Physical and related sciences	$66,000	$69,000	$68,500	$70,000	$47,300	$50,000	$34,000
Chemistry, except biochemistry	68,000	70,000	70,000	70,000	50,000	52,000	32,000
Geology and oceanography	60,000	61,000	60,000	65,700	42,000	41,500	S
Physics and astronomy	68,000	70,000	70,000	70,000	45,000	50,000	34,000
Other physical sciences (incl. earth)	50,000	50,700	50,700	S	S	S	S
Social and related sciences	55,500	56,000	56,000	59,000	48,000	48,000	45,000
Economics	65,000	65,000	66,000	61,500	51,000	50,100	60,000
Political and related sciences	55,000	56,000	55,000	60,000	39,800	40,000	S
Psychology	56,000	56,000	56,000	60,000	49,500	51,000	S
Sociology and anthropology	50,000	50,000	50,000	56,000	42,000	43,000	S
Other social sciences	50,000	51,700	51,700	53,000	43,000	43,000	S
Engineering	70,000	73,400	73,000	75,000	56,000	58,000	50,000
Aerospace/aeronautical	72,000	72,500	72,000	75,000	52,000	52,000	S
Chemical	73,000	75,000	75,000	80,000	61,500	63,000	55,000
Civil	65,000	68,000	68,000	70,000	50,000	54,000	S
Electrical/computer	75,000	78,000	79,600	76,700	62,000	63,000	55,000
Industrial	60,000	60,000	58,000	65,000	56,000	60,000	S
Mechanical	67,000	70,000	70,000	70,000	55,000	55,000	53,000
Other engineering	69,500	72,000	70,100	74,900	54,000	55,000	48,000
Place of birth:							
U.S.	61,000	61,000	61,000	65,000	53,000	50,000	S
Europe	62,000	68,000	55,000	70,000	51,100	53,800	40,000
Asia	60,000	68,000	60,000	69,800	49,500	50,000	40,000
North America	65,000	67,700	56,000	68,300	63,100	67,000	45,000
Central America	55,000	60,000	62,000	55,000	45,000	45,000	S
Carribean	60,000	65,000	S	65,000	52,000	52,000	S
South America	57,000	61,000	S	60,500	55,000	57,000	45,000
Africa	55,000	62,500	65,000	62,000	45,000	48,000	32,500
Oceania	72,000	75,000	S	S	67,000	70,000	S
Unknown	66,600	66,600	66,600	S	S	S	S

KEY: S = Median based on fewer than 200 weighted cases--suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: All numbers in the table are estimates derived from a sample. Median salaries were computed for full-time employed individuals only.

SOURCE: National Science Foundation/SRS, 1995 Survey of Doctorate Recipients

Table 50. Median annual salaries of doctoral scientists and engineers, by demographic characteristics and sector of employment: 1995

Page 1 of 2

Characteristics	Total	Universities and 4-year colleges	Other educational institutions	Private-for-profit	Self-employed	Private not-for-profit	Federal government	State & local government	Other sector
Total	$60,200	$52,300	$45,000	$75,000	$70,000	$60,000	$66,000	$50,000	$95,000
Sex:									
Men	65,000	55,000	47,000	75,000	72,000	64,000	67,000	51,000	95,000
Women	50,000	44,000	43,000	64,500	61,000	50,000	60,000	49,500	56,000
Race/Ethnicity:									
White	62,000	54,000	45,000	76,000	70,000	60,000	67,000	50,000	92,000
Black	55,000	50,000	50,000	66,000	75,000	52,000	60,000	48,000	S
Hispanic	60,000	45,000	40,000	68,500	75,000	56,000	60,000	45,000	90,000
Asian/Pacific Islander	54,400	47,800	45,500	70,000	35,000	57,000	62,000	S	S
Native American	52,000	48,000	S	67,000	S	S	S	S	S
Age:									
Under 30	40,000	31,000	S	58,400	S	32,600	40,000	S	S
30-34	47,000	36,000	38,500	61,000	50,000	45,000	46,100	44,000	S
35-39	53,800	44,200	40,000	69,500	68,000	50,000	55,000	45,000	80,000
40-44	60,000	50,000	39,000	75,400	70,000	61,000	61,300	49,800	80,000
45-49	66,000	56,500	45,000	81,300	75,000	71,000	68,000	53,700	100,000
50-54	70,000	63,000	50,000	89,000	75,000	75,000	75,000	50,000	95,000
55-59	70,000	64,800	52,000	86,400	65,000	75,000	79,000	55,000	110,000
60-64	70,000	66,000	51,400	80,000	60,000	62,000	85,000	56,000	S
65-75	65,000	67,900	45,000	67,700	40,000	53,000	74,000	58,600	S
Citizenship status:									
U.S. total	62,000	54,000	45,400	75,100	70,000	60,000	66,000	50,800	95,000
U.S. native	61,000	53,800	45,400	75,000	70,000	60,000	66,000	50,800	98,000
U.S. naturalized	68,000	59,000	46,000	76,000	80,000	68,000	65,000	50,000	95,000
Non-U.S. total	50,000	40,300	37,000	62,000	45,000	42,000	39,000	42,000	80,000
Non-U.S., permanent resident	51,000	42,900	37,000	63,000	50,000	46,000	39,000	42,200	75,000
Non-U.S., temporary resident	40,000	32,000	S	58,000	S	31,500	S	S	80,000
Geographic division:									
New England	60,000	52,000	45,000	75,000	64,000	58,000	63,000	54,000	S
Middle Atlantic	65,000	55,000	56,000	76,000	75,000	59,500	62,000	54,000	95,000
East North Central	60,000	53,000	47,000	72,000	80,000	58,000	60,800	50,000	S
West North Central	55,000	50,000	40,000	68,000	63,000	52,000	59,000	48,000	S
South Atlantic	62,000	51,500	40,700	73,000	61,000	68,000	70,000	48,000	105,000
East South Central	56,000	52,300	S	69,500	70,000	50,000	64,200	S	S
West South Central	60,000	50,000	39,000	76,000	65,000	57,000	63,300	45,000	S
Mountain	59,200	52,000	42,000	72,000	60,000	54,000	62,000	48,000	S
Pacific	63,800	55,300	47,000	76,000	70,000	63,000	63,800	52,500	S
Other U.S.	50,000	40,000	S	77,000	S	S	S	S	S

See explanatory information and SOURCE at end of table.

Table 50. Median annual salaries of doctoral scientists and engineers, by demographic characteristics and sector of employment: 1995

Page 2 of 2

Characteristics	Total	Universities and 4-year colleges	Other educational institutions	Private-for-profit	Self-employed	Private not-for-profit	Federal government	State & local government	Other sector
Place of birth:									
U.S.	$61,000	$53,900	$45,400	$75,500	$70,000	$60,000	$66,500	$50,800	$95,000
Europe	62,000	55,000	49,000	75,000	70,000	60,000	63,000	41,000	S
Asia	60,000	47,000	39,000	69,300	70,000	56,000	60,000	47,000	86,000
North America	65,000	56,000	S	78,000	S	S	S	S	S
Central America	55,000	51,700	S	70,000	S	S	S	S	S
Carribean	60,000	49,000	S	68,000	S	S	S	S	S
South America	57,000	48,000	S	65,000	S	S	S	S	S
Africa	55,000	48,000	S	70,000	S	S	S	45,000	S
Oceania	72,000	67,000	S	90,000	S	S	S	S	S
Unknown	66,600	S	S	S	S	S	S	S	S

KEY: S = Median based on fewer than 200 weighted cases--suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: All numbers in the table are estimates derived from a sample. Median salaries were computed for full-time employed individuals only.

SOURCE: National Science Foundation/SRS, 1995 Survey of Doctorate Recipients

Table 51. Median annual salaries of doctoral scientists and engineers, by demographic characteristics and primary work activity: 1995

Page 1 of 2

Characteristics	Total	Research & development					Teaching	Management, sales, and administration	Computer applications	Professional services	Other activities
		Total	Applied research	Basic research	Development	Design					
Total	$60,200	$63,000	$65,000	$52,000	$72,000	$71,500	$50,000	$79,000	$64,000	$60,000	$63,000
Sex:											
Men	65,000	65,000	67,000	56,200	73,000	72,000	51,000	82,000	65,000	66,000	65,000
Women	50,000	51,000	57,000	40,000	62,000	63,000	43,000	65,000	52,000	50,500	54,500
Race/Ethnicity:											
White	62,000	65,000	66,000	54,900	74,900	72,000	50,000	80,000	65,000	60,000	65,000
Black	55,000	56,000	53,300	51,000	66,000	S	46,000	65,900	45,000	58,000	50,000
Asian or Pacific Islander	60,000	60,000	60,000	40,000	67,500	70,000	48,900	78,000	61,000	58,000	60,000
Hispanic	54,400	55,000	57,000	48,500	65,000	S	45,000	74,300	67,000	55,000	57,000
Native American	52,000	65,000	65,000	S	S	S	46,200	S	S	50,000	S
Age:											
Under 30	40,000	40,000	50,000	29,000	55,000	58,000	37,000	50,000	54,000	33,300	S
30-34	47,000	48,500	54,100	34,000	60,800	60,000	38,000	63,000	57,000	42,000	46,000
35-39	53,800	56,000	60,000	45,000	67,000	66,000	42,000	68,000	60,000	54,000	52,000
40-44	60,000	63,400	64,000	56,200	73,500	75,000	45,000	75,000	66,000	60,000	60,000
45-49	66,000	70,000	70,000	64,000	81,500	78,000	49,700	80,000	70,000	66,000	70,000
50-54	70,000	77,500	75,000	77,000	85,000	78,600	53,700	88,000	70,000	67,100	65,000
55-59	70,000	79,000	79,000	75,000	85,000	80,000	56,000	90,000	72,000	68,000	75,500
60-64	70,000	80,000	80,000	80,000	85,000	75,000	60,000	82,000	65,000	59,500	65,000
65-75	65,000	75,000	70,000	78,000	70,600	65,000	60,000	72,000	48,000	50,500	67,000
Citizenship status:											
U.S. total	62,000	65,000	67,000	55,000	74,000	74,000	50,000	79,800	66,000	60,000	65,000
U.S. native	61,000	65,000	66,000	55,000	74,400	72,000	50,000	79,000	65,000	60,000	64,200
U.S. naturalized	68,000	70,000	70,000	60,000	74,000	75,000	54,000	82,000	70,000	70,000	70,000
Non-U.S. total	50,000	50,000	53,000	37,000	62,000	61,100	44,000	64,000	55,000	48,000	50,000
Non-U.S., permanent resident	51,000	52,000	55,000	40,000	63,000	62,000	45,300	65,000	55,000	48,000	52,000
Non-U.S., temporary resident	40,000	38,000	40,000	30,000	54,600	S	40,000	60,000	54,000	S	S

See explanatory information and SOURCE at end of table.

Table 51. Median annual salaries of doctoral scientists and engineers, by demographic characteristics and primary work activity: 1995

Page 2 of 2

Characteristics	Total	Research & development					Teaching	Management, sales, and administration	Computer applications	Professional services	Other activities
		Total	Applied research	Basic research	Development	Design					
Geographic division:											
New England	$60,000	$61,000	$67,000	$46,000	$70,000	$52,500	$51,000	$78,500	$68,000	$56,000	$65,000
Middle Atlantic	65,000	67,200	69,000	56,000	75,000	72,700	53,000	84,000	70,000	60,000	65,400
East North Central	60,000	62,700	65,000	54,000	70,000	70,000	50,000	77,200	58,800	61,400	51,800
West North Central	55,000	59,000	60,000	50,000	66,000	69,000	45,000	74,000	55,000	56,000	43,000
South Atlantic	62,000	62,400	64,000	53,000	73,600	71,500	46,900	80,000	62,500	60,000	75,000
East South Central	56,000	58,000	60,000	53,000	62,000	68,000	48,000	72,000	50,000	65,000	58,000
West South Central	60,000	63,800	65,000	52,000	70,000	75,000	46,200	78,000	60,800	60,000	70,000
Mountain	59,200	60,000	63,000	49,000	70,000	67,400	49,900	75,000	60,000	60,000	50,000
Pacific	63,800	65,000	67,400	51,600	75,100	76,000	52,800	80,000	66,000	60,000	55,500
Other U.S.	50,000	45,000	35,000	50,000	S	S	S	60,000	S	S	S
Place of birth:											
U.S.	61,000	65,000	66,000	55,000	74,900	72,000	50,000	79,000	65,000	60,000	64,000
Europe	62,000	60,000	62,500	50,000	72,500	75,000	53,000	80,300	66,000	62,300	67,000
Asia	60,000	60,000	60,000	40,000	68,000	70,000	49,500	78,000	61,000	60,000	60,000
North America	65,000	64,500	65,000	55,000	S	S	55,000	85,000	S	75,000	S
Central America	55,000	54,000	54,000	48,000	S	S	53,300	S	S	S	S
Carribean	60,000	62,000	65,000	S	S	S	48,000	75,000	S	60,000	S
South America	57,000	62,000	57,000	64,000	66,000	S	46,200	68,000	S	S	S
Africa	55,000	59,000	60,000	51,000	58,000	S	47,000	65,900	61,000	S	S
Oceania	72,000	60,000	67,000	S	S	S	S	S	S	S	S
Unknown	66,600	S	S	S	S	S	S	S	S	S	S

KEY: S = Median based on fewer than 200 weighted cases--suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: All numbers in the table are estimates derived from a sample.
Median salaries were computed for full-time employed individuals only.

SOURCE: National Science Foundation/SRS, 1995 Survey of Doctorate Recipients

Table 52. Median annual salaries of doctoral scientists and engineers, by demographic characteristics and broad field of doctorate: 1995

Page 1 of 2

Characteristics	Total	Sciences	Computer and mathematical sciences	Life and related sciences	Physical and related sciences	Social and related sciences	Engineering
Total	$60,200	$60,000	$60,000	$57,000	$66,000	$55,500	$70,000
Sex:							
Men	65,000	62,000	61,000	60,000	68,000	60,000	70,000
Women	50,000	50,000	53,000	49,000	56,000	50,000	58,200
Race/Ethnicity:							
White	62,000	60,000	62,000	58,000	68,500	56,000	72,200
Black	55,000	53,000	57,000	51,000	59,000	52,300	65,900
Asian or Pacific Islander	60,000	53,300	55,000	49,000	60,000	50,900	65,600
Hispanic	54,400	52,000	49,900	52,500	60,200	48,500	62,900
Native American	52,000	50,000	S	56,000	73,000	46,000	S
Age:							
Under 30	40,000	35,000	41,000	28,500	39,000	39,000	57,300
30-34	47,000	41,000	50,000	34,500	46,000	42,000	60,000
35-39	53,800	50,000	57,000	49,000	58,200	48,000	63,000
40-44	60,000	59,000	60,000	57,800	68,000	54,700	70,000
45-49	66,000	64,800	65,000	62,000	74,700	60,000	80,000
50-54	70,000	68,000	67,000	66,500	78,100	61,000	85,000
55-59	70,000	68,000	63,000	69,000	75,000	60,000	85,000
60-64	70,000	67,000	67,000	70,000	75,000	60,000	81,000
65-75	65,000	65,000	75,000	65,000	64,000	62,000	67,700
Year of doctorate:							
1993-94 graduates	38,600	36,000	45,000	30,400	36,500	38,000	52,000
1990-92 graduates	48,000	43,600	50,000	40,000	48,000	44,000	60,000
1985-89 graduates	55,000	52,200	59,000	52,000	58,000	50,000	67,000
1980-84 graduates	63,000	61,000	60,000	60,000	70,000	60,000	74,800
1970-79 graduates	70,000	69,000	68,600	68,000	75,000	62,000	83,000
1960-69 graduates	75,000	74,000	67,000	75,000	78,300	66,000	90,000
Pre-1960 graduates	75,000	73,200	S	76,000	75,000	70,000	80,000
Citizenship status:							
U.S. total	62,000	60,000	62,500	58,400	69,000	56,000	73,400
U.S. native	61,000	60,000	63,000	58,000	68,500	56,000	73,000
U.S. naturalized	68,000	64,000	60,000	60,300	70,000	59,000	75,000
Non-U.S. total	50,000	45,000	50,000	37,300	47,300	48,000	56,000
Non-U.S., permanent resident	51,000	48,000	51,700	40,000	50,000	48,000	58,000
Non-U.S., temporary resident	40,000	36,700	41,000	28,000	34,000	45,000	50,000

See explanatory information and SOURCE at end of table.

Table 52. Median annual salaries of doctoral scientists and engineers, by demographic characteristics and broad field of doctorate: 1995

Page 2 of 2

Characteristics	Total	Sciences	Computer and mathematical sciences	Life and related sciences	Physical and related sciences	Social and related sciences	Engineering
Place of birth:							
U.S.	$61,000	$60,000	$63,000	$58,000	$68,700	$56,000	$73,200
Europe	62,000	60,000	52,000	58,000	67,400	57,000	70,000
Asia	60,000	53,000	55,000	49,800	60,000	50,000	65,000
North America	65,000	64,000	60,000	60,000	69,600	63,000	83,000
Central America	55,000	53,300	S	51,000	55,000	53,000	62,000
Carribean	60,000	60,000	S	58,000	62,000	60,000	70,000
South America	57,000	57,000	46,200	54,400	61,000	62,000	57,000
Africa	55,000	50,000	62,000	47,000	54,000	48,000	65,000
Oceania	72,000	72,000	S	S	S	60,000	S
Unknown	66,600	60,000	S	S	S	S	S

KEY: S = Median based on fewer than 200 weighted cases--suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: All numbers in the table are estimates derived from a sample.
Median salaries were computed for full-time employed individuals only.

SOURCE: National Science Foundation/SRS, 1995 Survey of Doctorate Recipients

Table 53. Median annual salaries of doctoral scientists and engineers, by demographic characteristics and broad occupation: 1995

Page 1 of 2

Characteristics	Total	Scientists	Computer and mathematical scientists	Life and related scientists	Physical and related scientists	Social and related scientists	Engineers	Non-S&E occupations
Total	$60,200	$55,000	$60,000	$53,300	$60,000	$53,000	$67,000	$73,500
Sex:								
Men	65,000	59,000	60,000	56,000	61,000	56,000	67,000	79,000
Women	50,000	47,000	51,300	44,000	52,000	47,500	58,300	55,000
Race/Ethnicity:								
White	62,000	56,300	60,000	55,000	61,000	54,000	68,600	75,000
Black	55,000	50,000	55,000	46,000	53,300	50,000	65,000	60,000
Asian or Pacific Islander	60,000	50,900	60,000	42,000	53,000	50,000	64,000	72,000
Hispanic	54,400	49,200	48,000	44,700	55,000	46,000	57,000	70,000
Native American	52,000	50,000	S	59,900	S	48,000	S	50,000
Age:								
Under 30	40,000	35,000	43,000	27,000	36,000	40,000	57,500	40,000
30-34	47,000	40,000	51,000	32,000	45,000	40,000	58,000	52,000
35-39	53,800	50,000	58,000	45,500	55,000	45,000	60,000	63,000
40-44	60,000	55,000	60,000	55,000	61,000	52,000	68,000	70,000
45-49	66,000	60,000	60,000	60,000	69,300	55,000	76,000	77,800
50-54	70,000	63,500	65,000	65,000	70,000	60,000	77,000	81,000
55-59	70,000	65,000	60,000	65,500	72,400	60,000	76,700	82,000
60-64	70,000	65,000	65,000	68,000	70,000	60,000	75,000	75,000
65-75	65,000	61,000	50,000	67,900	56,000	62,000	80,000	66,000
Year of doctorate:								
1993-94 graduates	38,600	35,000	48,000	28,000	37,000	37,500	51,700	42,400
1990-92 graduates	48,000	43,000	52,000	36,000	46,000	42,100	58,000	50,000
1985-89 graduates	55,000	51,600	60,000	50,000	55,000	50,000	65,000	61,000
1980-84 graduates	63,000	59,100	60,000	57,800	64,000	56,000	70,000	71,300
1970-79 graduates	70,000	64,000	65,000	65,000	70,000	60,000	78,000	82,000
1960-69 graduates	75,000	69,500	66,000	70,000	73,000	64,900	80,000	92,000
Pre-1960 graduates	75,000	70,000	50,000	75,000	65,000	69,100	80,000	90,000
Citizenship status:								
U.S. total	62,000	57,000	60,000	55,000	61,600	53,500	70,000	75,000
U.S. native	61,000	56,000	60,000	55,000	61,000	53,300	69,000	74,000
U.S. naturalized	68,000	61,000	62,000	59,000	65,000	55,000	70,000	78,000
Non-U.S. total	50,000	45,000	52,000	33,000	45,000	48,000	55,000	55,000
Non-U.S., permanent resident	51,000	48,000	54,000	35,000	50,000	49,900	57,000	56,000
Non-U.S., temporary resident	40,000	37,500	45,000	28,000	35,000	43,000	50,000	52,000

See explanatory information and SOURCE at end of table.

Table 53. Median annual salaries of doctoral scientists and engineers, by demographic characteristics and broad occupation: 1995

Page 2 of 2

Characteristics	Total	Scientists	Computer and mathematical scientists	Life and related scientists	Physical and related scientists	Social and related scientists	Engineers	Non-S&E occupations
Place of birth:								
U.S.	$61,000	$56,000	$60,000	$55,000	$61,000	$53,300	$69,000	$74,000
Europe	62,000	57,000	55,000	55,000	60,000	55,000	65,000	74,000
Asia	60,000	51,000	58,000	42,000	53,000	50,000	63,700	72,000
North America	65,000	62,200	65,000	60,000	60,000	64,000	74,000	70,000
Central America	55,000	53,000	S	48,000	55,000	S	55,000	S
Carribean	60,000	53,000	S	S	66,000	50,000	S	77,000
South America	57,000	51,000	47,000	46,500	55,000	62,000	60,000	67,800
Africa	55,000	48,000	62,000	42,900	52,500	41,700	63,200	60,000
Oceania	72,000	55,000	S	S	S	S	S	S
Unknown	66,600	45,000	S	S	S	S	S	S

KEY: S = Median based on fewer than 200 weighted cases--suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: All numbers in the table are estimates derived from a sample.
Median salaries were computed for full-time employed individuals only.

SOURCE: National Science Foundation/SRS, 1995 Survey of Doctorate Recipients

Table 54. Median annual salaries of doctoral scientists and engineers, by employment-related characteristics, race/ethnicity, and sex: 1995

Page 1 of 2

Characteristics	Total			White			Black		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total	$60,200	$65,000	$50,000	$62,000	$65,000	$50,000	$55,000	$57,000	$51,000
Year of doctorate:									
1993-94 graduates	38,600	41,000	35,000	39,000	42,000	35,000	41,000	44,000	41,000
1990-92 graduates	48,000	50,000	43,000	47,000	50,000	42,400	48,000	48,500	48,000
1985-89 graduates	55,000	58,000	50,000	55,000	58,000	50,000	52,000	52,000	51,000
1980-84 graduates	63,000	65,000	56,000	63,000	65,000	56,000	58,000	58,000	57,000
1970-79 graduates	70,000	72,000	60,000	70,000	72,000	60,000	65,000	66,000	60,000
1960-69 graduates	75,000	76,800	62,100	75,000	77,000	62,100	65,000	65,000	S
Pre-1960 graduates	75,000	75,000	73,500	75,000	75,000	78,000	S	S	S
Sector of employment:									
Universities and 4-year colleges	52,300	55,000	44,000	54,000	57,000	45,000	50,000	50,000	46,000
Other educational institutions	45,000	47,000	43,000	45,000	48,000	42,000	50,000	41,000	50,000
Private-for-profit	75,000	75,000	64,500	76,000	78,000	65,000	66,000	67,000	65,000
Self-employed	70,000	72,000	61,000	70,000	72,000	60,000	75,000	S	S
Private not-for-profit	60,000	64,000	50,000	60,000	65,000	50,000	52,000	52,000	S
Federal government	66,000	67,000	60,000	67,000	68,000	60,000	60,000	60,000	61,500
State and local government	50,000	51,000	49,500	50,000	51,100	50,000	48,000	48,000	S
Other sector	95,000	95,000	56,000	92,000	100,000	58,000	S	S	S
Primary work activity:									
R&D	63,000	65,000	51,000	65,000	67,000	52,000	56,000	58,000	55,000
Applied research	65,000	67,000	57,000	66,000	68,800	58,000	53,300	53,500	52,000
Basic research	52,000	56,200	40,000	54,900	60,000	42,000	51,000	52,500	S
Development	72,000	73,000	62,000	74,900	75,000	62,500	66,000	66,000	S
Design	71,500	72,000	63,000	72,000	72,000	70,000	S	S	S
Teaching	50,000	51,000	43,000	50,000	51,700	43,000	46,000	47,300	43,700
Management, sales, and administration	79,000	82,000	65,000	80,000	83,000	65,000	65,900	70,000	60,000
Computer applications	64,000	65,000	52,000	65,000	68,000	50,000	45,000	45,000	S
Professional services	60,000	66,000	50,500	60,000	66,000	51,000	58,000	60,000	56,000
Other activities	63,000	65,000	54,500	65,000	66,500	54,000	50,000	S	S

See explanatory information and SOURCE at end of table.

Table 54. Median annual salaries of doctoral scientists and engineers, by employment-related characteristics, race ethnicity, and sex: 1995

Page 2 of 2

Characteristics	Asian or Pacific Islander			Hispanic			Native American		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total	$60,000	$61,000	$48,000	$54,400	$58,000	$42,000	$52,000	$52,000	$49,000
Year of doctorate:									
1993-94 graduates	38,000	40,000	33,000	39,900	41,000	36,000	S	S	S
1990-92 graduates	50,000	50,000	45,000	46,000	50,000	40,000	S	S	S
1985-89 graduates	60,000	61,900	50,000	54,000	55,000	46,000	43,700	S	S
1980-84 graduates	68,000	69,600	60,000	56,000	60,000	51,000	58,000	58,000	S
1970-79 graduates	75,000	75,000	63,000	62,900	66,000	48,300	60,000	60,000	S
1960-69 graduates	75,400	78,000	63,300	80,000	85,000	S	S	S	S
Pre-1960 graduates	70,600	70,600	S	S	S	S	S	S	S
Sector of employment:									
Universities and 4-year colleges	45,000	48,000	38,000	47,800	50,000	39,000	48,000	46,500	48,000
Other educational institutions	40,000	40,000	S	45,500	S	S	S	S	S
Private-for-profit	68,500	70,000	60,000	70,000	70,000	62,000	67,000	73,500	S
Self-employed	75,000	80,000	S	35,000	35,000	S	S	S	S
Private not-for-profit	56,000	60,000	40,000	57,000	57,000	52,500	S	S	S
Federal government	60,000	61,000	57,000	62,000	63,000	S	S	S	S
State and local government	45,000	45,000	47,000	S	S	S	S	S	S
Other sector	90,000	95,000	S	S	S	S	S	S	S
Primary work activity:									
R&D	60,000	61,000	48,000	55,000	60,000	42,000	65,000	67,000	S
Applied research	60,000	62,000	56,000	57,000	60,000	46,000	65,000	67,000	S
Basic research	40,000	45,000	34,000	48,500	54,000	34,000	S	S	S
Development	67,500	69,000	60,000	65,000	65,000	S	S	S	S
Design	70,000	70,000	S	S	S	S	S	S	S
Teaching	48,900	50,000	41,000	45,000	49,800	39,200	46,200	46,200	S
Management, sales, and administration	78,000	80,000	60,000	74,300	75,000	60,000	S	S	S
Computer applications	61,000	61,000	55,000	67,000	67,000	S	S	S	S
Professional services	58,000	70,000	45,000	55,000	60,000	46,000	50,000	S	S
Other activities	60,000	60,300	58,000	57,000	57,000	S	S	S	S

KEY: S = Median based on fewer than 200 weighted cases--suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: All numbers in the table are estimates derived from a sample.
Median salaries were computed for full-time employed individuals only.

SOURCE: National Science Foundation/SRS, 1995 Survey of Doctorate Recipients

Table 55. Median annual salaries of doctoral scientists and engineers, by employment-related characteristics and citizenship status: 1995

Page 1 of 1

Characteristics	Total	U.S. Citizen			Non-U.S. Citizen		
		Total	Native	Naturalized	Total	Permanent resident	Temporary resident
Total	$60,200	$62,000	$61,000	$68,000	$50,000	$51,000	$40,000
Year of doctorate:							
1993-94 graduates	38,600	39,000	39,000	40,000	38,000	38,000	37,000
1990-92 graduates	48,000	47,400	47,000	53,000	48,000	50,000	41,700
1985-89 graduates	55,000	55,200	55,000	61,000	55,000	55,000	45,000
1980-84 graduates	63,000	63,000	62,500	67,400	62,000	62,000	S
1970-79 graduates	70,000	70,000	70,000	74,900	68,000	68,000	101,000
1960-69 graduates	75,000	75,000	75,000	78,000	70,000	68,000	S
Pre-1960 graduates	75,000	75,000	72,000	89,000	S	S	S
Sector of employment:							
Universities and 4-year colleges	52,300	54,000	53,800	59,000	40,300	42,900	32,000
Other educational institutions	45,000	45,400	45,400	46,000	37,000	37,000	S
Private-for-profit	75,000	75,100	75,000	76,000	62,000	63,000	58,000
Self-employed	70,000	70,000	70,000	80,000	45,000	50,000	S
Private not-for-profit	60,000	60,000	60,000	68,000	42,000	46,000	31,500
Federal government	66,000	66,000	66,000	65,000	39,000	39,000	S
State and local government	50,000	50,800	50,800	50,000	42,000	42,200	S
Other sector	95,000	95,000	98,000	95,000	80,000	75,000	80,000
Primary work activity:							
R&D	63,000	65,000	65,000	70,000	50,000	52,000	38,000
Applied research	65,000	67,000	66,000	70,000	53,000	55,000	40,000
Basic research	52,000	55,000	55,000	60,000	37,000	40,000	30,000
Development	72,000	74,000	74,400	74,000	62,000	63,000	54,600
Design	71,500	74,000	72,000	75,000	61,100	62,000	S
Teaching	50,000	50,000	50,000	54,000	44,000	45,300	40,000
Management, sales, and administration	79,000	79,800	79,000	82,000	64,000	65,000	60,000
Computer applications	64,000	66,000	65,000	70,000	55,000	55,000	54,000
Professional services	60,000	60,000	60,000	70,000	48,000	48,000	S
Other activities	63,000	65,000	64,200	70,000	50,000	52,000	S

KEY: S = Median based on fewer than 200 weighted cases--suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: All numbers in the table are estimates derived from a sample. Median salaries were computed for full-time employed individuals only.

SOURCE: National Science Foundation/SRS, 1995 Survey of Doctorate Recipients

Table [illegible]. Median annual salaries of doctoral scientists and engineers, by employment-related characteristics and sector of employment: 1995

Page 1 of 1

Characteristics	Total	Universities and 4-year colleges	Other educational institutions	Private-for-profit	Self-employed	Private not-for-profit	Federal government	State & local government	Other sector
Total	$60,200	$52,300	$45,000	$75,000	$70,000	$60,000	$66,000	$50,000	$95,000
Year of doctorate:									
1993-94 graduates	38,600	33,000	36,000	56,500	60,000	38,000	39,500	40,000	65,000
1990-92 graduates	48,000	39,000	40,000	60,200	55,000	46,000	51,500	44,000	55,000
1985-89 graduates	55,000	47,500	45,000	70,000	60,000	54,000	56,700	50,000	82,000
1980-84 graduates	63,000	53,000	46,000	77,000	80,000	63,000	64,200	52,000	95,000
1970-79 graduates	70,000	62,000	50,000	85,000	75,000	76,000	75,000	54,000	110,000
1960-69 graduates	75,000	70,000	48,000	92,000	70,000	75,500	81,500	58,600	105,000
Pre-1960 graduates	75,000	78,000	S	78,000	33,000	62,500	93,000	S	S
Primary work activity:									
R&D	63,000	53,000	54,000	72,000	50,000	60,000	64,000	48,500	80,000
Applied research	65,000	56,000	S	71,000	50,000	63,000	65,000	47,300	80,000
Basic research	52,000	50,000	S	67,400	S	54,000	60,100	60,000	S
Development	72,000	56,000	S	72,400	65,000	75,000	71,000	S	95,000
Design	71,500	51,000	S	75,000	50,000	80,000	60,000	S	S
Teaching	50,000	50,000	41,000	70,000	92,000	36,000	S	S	S
Management, sales, and administration	79,000	73,500	61,000	90,000	60,000	68,000	79,000	55,000	120,000
Computer applications	64,000	50,000	S	67,500	65,000	67,000	58,400	45,000	S
Professional services	60,000	50,000	50,000	75,000	75,000	48,500	60,000	50,000	55,000
Other activities	63,000	54,000	48,000	70,000	60,000	62,000	69,000	48,500	130,000

KEY: S = Median based on fewer than 200 weighted cases--suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: All numbers in the table are estimates derived from a sample.
Median salaries were computed for full-time employed individuals only.

SOURCE: National Science Foundation/SRS, 1995 Survey of Doctorate Recipients

Table 57. Median annual salaries of doctoral scientists and engineers, by field of doctorate and year of doctorate: 1995

Page 1 of 1

Field of doctorate	Total	1993-1994 grads	1990-1992 grads	1985-1989 grads	1980-1984 grads	1970-1979 grads	1960-1969 grads	Pre-1960 grads
Total	$60,200	$38,600	$48,000	$55,000	$63,000	$70,000	$75,000	$75,000
Sciences	60,000	36,000	43,600	52,200	61,000	69,000	74,000	73,200
Computer and mathematical sciences	60,000	45,000	50,000	59,000	60,000	68,600	67,000	S
Computer and information sciences	65,000	54,000	61,000	65,000	72,500	78,000	S	S
Mathematical sciences	60,000	36,000	40,000	47,000	55,000	67,000	67,000	S
Life and related sciences	57,000	30,400	40,000	52,000	60,000	68,000	75,000	76,000
Agricultural and food sciences	55,000	36,000	43,400	51,000	58,000	62,000	72,000	80,000
Biological and health sciences	57,700	30,000	38,600	52,000	60,000	70,000	75,000	76,000
Environmental sciences	55,900	47,000	47,800	50,000	60,000	62,000	70,000	S
Physical and related sciences	66,000	36,500	48,000	58,000	70,000	75,000	78,300	75,000
Chemistry, except biochemistry	68,000	38,900	52,000	60,900	70,000	76,000	78,000	72,000
Geology and oceanography	60,000	37,000	42,000	50,000	65,000	72,000	78,000	S
Physics and astronomy	68,000	36,000	45,000	55,900	70,000	77,000	79,000	79,000
Other physical sciences (incl. earth)	50,000	S	40,000	50,000	62,500	75,400	S	S
Social and related sciences	55,500	38,000	44,000	50,000	60,000	62,000	66,000	70,000
Economics	65,000	47,800	50,000	59,000	63,000	70,000	76,400	65,700
Political and related sciences	55,000	37,000	39,000	45,000	55,000	63,000	66,500	80,000
Psychology	56,000	38,000	45,500	52,800	60,000	62,600	62,000	69,100
Sociology and anthropology	50,000	32,000	40,000	43,000	50,000	56,000	65,700	62,800
Other social sciences	50,000	39,000	42,000	45,000	59,000	60,000	63,500	S
Engineering	70,000	52,000	60,000	67,000	74,800	83,000	90,000	80,000
Aerospace/aeronautical	72,000	48,000	56,000	65,000	S	82,300	89,000	S
Chemical	73,000	55,000	64,000	70,000	80,000	88,900	92,000	S
Civil	65,000	47,800	55,000	57,000	66,000	80,000	93,000	S
Electrical/computer	75,000	60,000	64,000	72,000	79,200	90,000	90,000	90,000
Industrial	60,000	49,300	52,000	60,000	S	65,000	96,000	S
Mechanical	67,000	51,500	59,000	62,000	70,000	81,700	88,000	S
Other engineering	69,500	48,000	55,000	65,900	74,500	80,000	80,000	80,000

KEY: S = Median based on fewer than 200 weighted cases--suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: All numbers in the table are estimates derived from a sample. Median salaries were computed for full-time employed individuals only.

SOURCE: National Science Foundation/SRS, 1995 Survey of Doctorate Recipients

Table 58. Median annual salaries of doctoral scientists and engineers, by geographic location and broad field of doctorate: 1995

Page 1 of 2

Geographic location	Total	Sciences	Computer and mathematical sciences	Life and related sciences	Physical and related sciences	Social and related sciences	Engineering
Total	$60,200	$60,000	$60,000	$57,000	$66,000	$55,500	$70,000
New England	60,000	59,000	67,000	54,500	67,000	55,000	70,000
Connecticut	67,000	65,000	65,000	63,000	74,000	60,000	79,600
Maine	50,000	48,300	S	47,000	58,500	50,000	S
Massachusetts	60,000	59,500	72,000	53,000	64,000	58,000	72,000
New Hampshire	55,700	50,000	S	50,000	56,000	50,000	67,000
Rhode Island	55,000	53,500	S	54,000	65,000	50,000	65,000
Vermont	57,000	54,500	S	47,000	S	55,000	63,000
Middle Atlantic	65,000	64,000	68,000	62,000	70,000	60,000	72,000
New Jersey	75,000	74,000	80,000	73,000	75,000	65,000	75,000
New York	63,000	61,000	65,000	60,000	67,000	60,000	71,000
Pennsylvania	60,000	60,000	58,600	60,000	63,000	55,000	70,000
East North Central	60,000	58,000	58,000	60,000	63,000	54,000	66,600
Illinois	60,000	60,000	62,000	60,000	61,000	58,000	68,000
Indiana	56,500	55,900	46,000	58,000	60,000	50,000	65,000
Michigan	64,300	62,000	57,000	62,000	70,000	56,000	70,000
Ohio	58,000	56,000	54,300	60,000	63,000	51,300	64,600
Wisconsin	55,000	53,000	60,000	51,000	57,300	50,300	66,000
West North Central	55,000	53,000	50,000	54,400	59,000	50,000	63,000
Iowa	55,000	54,500	55,500	55,000	51,000	54,500	59,400
Kansas	51,000	50,000	42,000	50,000	53,000	48,000	61,000
Minnesota	60,000	58,000	65,000	59,000	67,500	52,000	66,600
Missouri	54,000	52,000	48,900	55,000	56,000	49,500	74,600
North Dakota	43,000	43,000	S	49,000	S	42,000	S
Nebraska	53,000	53,000	S	57,500	55,000	50,000	57,500
South Dakota	43,900	44,000	S	48,900	S	40,000	S
South Atlantic	62,000	60,000	60,000	58,500	66,000	60,000	70,000
Delaware	72,000	71,100	S	70,000	76,600	55,000	80,000
Dist of Columbia	75,000	75,000	75,000	67,000	75,000	79,200	72,000
Florida	58,000	54,000	50,000	52,000	53,900	60,000	64,700
Georgia	55,000	53,000	53,000	58,000	50,000	50,000	68,000
Maryland	62,000	60,000	60,000	60,000	70,000	55,000	75,000
North Carolina	59,400	57,300	54,500	63,000	58,600	51,600	70,000
South Carolina	54,000	50,000	50,000	52,100	59,500	46,000	65,000
Virginia	65,000	62,500	65,000	55,000	77,900	60,000	75,000
West Virginia	58,000	55,000	S	51,600	63,600	52,000	61,000

See explanatory information and SOURCE at end of table.

Table 58. Median annual salaries of doctoral scientists and engineers, by geographic location and broad field of doctorate: 1995

Page 2 of 2

Geographic location	Total	Sciences	Computer and mathematical sciences	Life and related sciences	Physical and related sciences	Social and related sciences	Engineering
East South Central	$56,000	$55,000	$49,000	$52,500	$60,000	$55,000	$65,000
Alabama	59,200	56,000	55,000	56,000	58,000	50,100	67,000
Kentucky	52,500	50,000	46,500	55,000	62,000	47,000	70,000
Mississippi	55,000	52,300	S	52,300	65,900	50,000	67,000
Tennessee	57,500	56,000	50,000	50,000	60,000	60,000	60,000
West South Central	60,000	55,000	53,600	51,000	66,300	50,000	72,500
Arkansas	48,500	47,500	S	44,800	54,000	47,500	S
Louisiana	56,000	55,000	41,000	49,600	61,500	56,000	65,700
Oklahoma	57,000	55,000	S	50,000	60,000	56,500	80,000
Texas	60,800	57,000	60,000	52,500	68,000	50,000	75,000
Mountain	59,200	55,000	60,000	51,000	63,900	50,000	70,000
Arizona	57,000	51,000	49,000	50,000	58,500	49,000	69,000
Colorado	58,400	56,000	59,000	50,000	61,000	50,000	72,000
Idaho	57,000	54,000	S	54,000	66,000	53,000	64,000
Montana	44,000	44,000	S	52,000	52,300	40,000	S
New Mexico	67,400	65,000	65,000	52,500	71,000	44,000	73,000
Nevada	60,000	55,500	S	53,600	72,500	55,000	68,000
Utah	54,000	51,000	S	51,000	45,000	54,000	70,000
Wyoming	48,000	46,000	S	S	S	46,000	S
Pacific	63,800	60,700	65,000	58,000	70,000	58,000	73,000
Alaska	57,000	56,000	S	55,000	60,000	56,000	S
California	67,000	63,100	67,000	60,000	71,600	60,000	76,000
Hawaii	60,000	60,000	S	63,500	62,800	56,000	S
Oregon	52,000	50,000	55,900	48,500	62,000	46,000	63,200
Washington	57,700	55,500	60,000	54,000	62,000	55,000	64,000
U.S. possessions	50,000	50,000	S	65,000	50,000	40,000	48,000

KEY: S = Median based on fewer than 200 weighted cases--suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: All numbers in the table are estimates derived from a sample.
Median salaries were computed for full-time employed individuals only.

SOURCE: National Science Foundation/SRS, 1995 Survey of Doctorate Recipients

Table 39. Median annual salaries of doctoral scientists and engineers, by geographic location and broad occupation: 1995

Page 1 of 2

Geographic location	Total	Scientists	Computer and mathematical scientists	Life and related scientists	Physical and related scientists	Social and related scientists	Engineers	Non-S&E occupations
Total	$60,200	$55,000	$60,000	$53,300	$60,000	$53,000	$67,000	$73,500
New England	60,000	56,000	65,000	51,000	60,000	55,000	65,000	72,000
Connecticut	67,000	65,000	68,000	60,000	73,000	61,000	67,000	75,000
Maine	50,000	46,000	S	45,000	56,000	48,000	S	58,000
Massachusetts	60,000	56,000	66,000	50,000	60,000	55,600	65,000	75,000
New Hampshire	55,700	46,000	68,700	42,300	49,000	46,000	67,000	62,500
Rhode Island	55,000	52,700	S	57,500	S	50,000	65,000	55,000
Vermont	57,000	50,900	S	40,000	S	55,000	63,000	60,000
Middle Atlantic	65,000	60,000	65,000	58,900	65,000	56,000	70,000	78,000
New Jersey	75,000	69,000	74,000	67,400	71,400	60,000	72,500	95,000
New York	63,000	58,700	63,000	58,000	63,000	55,000	68,000	75,000
Pennsylvania	60,000	55,400	55,000	53,000	60,000	55,000	65,000	72,000
East North Central	60,000	55,000	57,300	55,000	56,000	50,000	64,000	72,000
Illinois	60,000	56,500	60,000	55,000	56,200	53,600	66,600	70,000
Indiana	56,500	53,000	56,000	55,000	55,000	48,500	56,400	71,000
Michigan	64,300	58,000	57,000	60,000	60,000	55,000	68,000	78,000
Ohio	58,000	52,000	52,000	54,400	56,000	49,200	61,200	75,000
Wisconsin	55,000	50,000	56,000	49,000	54,000	50,000	56,000	60,000
West North Central	55,000	50,200	55,000	54,000	52,000	49,000	61,000	64,500
Iowa	55,000	55,000	60,000	55,000	49,500	55,000	57,000	52,000
Kansas	51,000	50,000	43,000	57,000	50,000	50,000	56,000	46,300
Minnesota	60,000	53,300	60,000	51,000	59,000	50,000	65,000	80,000
Missouri	54,000	50,000	47,900	55,000	52,000	46,500	70,000	70,100
North Dakota	43,000	42,000	S	48,000	S	41,000	S	53,000
Nebraska	53,000	52,000	S	57,500	54,000	43,000	S	64,000
South Dakota	43,900	44,000	S	44,000	S	40,000	S	40,000
South Atlantic	62,000	56,000	60,000	53,500	60,000	55,000	65,000	76,000
Delaware	72,000	70,000	S	70,000	76,600	S	80,000	76,200
Dist of Columbia	75,000	68,700	70,000	60,000	65,000	72,000	65,000	85,000
Florida	58,000	50,000	45,800	45,000	54,000	52,000	62,000	65,000
Georgia	55,000	50,000	54,400	53,000	49,000	50,000	67,800	67,000
Maryland	62,000	55,600	61,800	52,800	63,000	53,000	72,000	78,000
North Carolina	59,400	55,000	55,500	58,000	55,000	48,600	62,000	72,900
South Carolina	54,000	49,100	50,000	50,000	50,000	46,000	65,000	63,000
Virginia	65,000	58,000	66,000	50,000	65,000	52,000	70,000	83,000
West Virginia	58,000	53,000	S	51,000	59,000	52,000	60,000	60,000

See explanatory information and SOURCE at end of table.

Table 59. Median annual salaries of doctoral scientists and engineers, by geographic location and broad occupation: 1995

Page 2 of 2

Geographic location	Total	Scientists	Computer and mathematical scientists	Life and related scientists	Physical and related scientists	Social and related scientists	Engineers	Non-S&E occupations
East South Central	$56,000	$52,000	$50,000	$52,000	$54,000	$51,000	$63,000	$65,000
Alabama	59,200	50,100	45,600	53,700	48,000	50,000	69,500	70,000
Kentucky	52,500	48,000	48,000	49,000	53,000	45,000	67,000	61,000
Mississippi	55,000	52,000	S	52,100	65,900	45,000	60,000	58,000
Tennessee	57,500	55,000	50,000	48,000	55,000	60,000	60,000	65,000
West South Central	60,000	52,000	52,500	50,000	57,300	50,000	67,500	70,000
Arkansas	48,500	44,800	S	44,000	40,000	47,000	S	54,000
Louisiana	56,000	50,000	45,000	46,000	58,000	50,000	62,000	65,000
Oklahoma	57,000	50,000	45,000	48,900	50,000	58,000	64,000	65,000
Texas	60,800	54,000	58,700	52,000	59,000	48,400	70,000	70,000
Mountain	59,200	52,000	54,000	48,500	61,000	49,200	65,000	70,000
Arizona	57,000	50,000	49,000	45,000	53,000	50,200	66,000	61,500
Colorado	58,400	54,000	58,000	49,800	55,000	50,000	66,000	75,000
Idaho	57,000	50,000	S	50,000	55,000	48,000	61,000	70,000
Montana	44,000	42,500	S	50,000	S	38,000	S	57,000
New Mexico	67,400	64,900	60,000	49,900	70,000	40,000	67,400	78,000
Nevada	60,000	55,000	S	S	65,000	55,000	68,000	70,000
Utah	54,000	49,100	60,000	48,700	43,000	49,100	60,000	65,000
Wyoming	48,000	44,000	S	S	S	S	S	S
Pacific	63,800	59,000	63,000	54,000	62,900	55,000	70,000	75,000
Alaska	57,000	57,000	S	S	50,000	57,000	S	63,000
California	67,000	60,000	65,000	55,000	66,000	58,000	73,000	80,000
Hawaii	60,000	58,000	S	60,000	58,000	55,000	S	65,000
Oregon	52,000	48,500	52,000	48,100	56,300	45,200	62,000	55,000
Washington	57,700	54,000	57,000	51,000	55,000	54,000	65,000	67,000
U.S. possessions	50,000	40,000	S	S	S	S	45,000	70,000

KEY: S = Median based on fewer than 200 weighted cases--suppressed for reasons of respondent confidentiality and/or data reliability.

NOTE: All numbers in the table are estimates derived from a sample.
Median salaries were computed for full-time employed individuals only.

SOURCE: National Science Foundation/SRS, 1995 Survey of Doctorate Recipients

Appendix A.

Technical Notes

APPENDIX A. TECHNICAL NOTES

The data on doctoral scientists and engineers contained in this report come from the 1995 Survey of Doctorate Recipients (SDR). The SDR has been conducted biennially since 1973 by the National Research Council (NRC) for the National Science Foundation (NSF). Additional data on education and demographic information come from the National Research Council's Doctorate Records File (DRF). The DRF contains data from an ongoing census of research doctorates earned in the United States since 1920.

THE SAMPLING FRAME AND TARGET POPULATION

For the 1995 SDR the sampling frame for scientists and engineers was selected from the DRF to include individuals who

(1) had earned a doctoral degree from a U.S. college or university in a science or engineering field;

(2) were U.S. citizens or, if non-U.S. citizens, indicated they had plans to remain in the United States after degree award; and

(3) were under 76 years of age as of April 1995 (the survey reference date).

The 1995 frame consisted of graduates who had earned their degrees between January 1942 and June 1994. Persons who did not meet the age criteria (or had died) were eliminated from the sample.

The survey had two additional eligibility criteria for the survey target population. The sampled member must be resident in the United States and not institutionalized as of the reference date.

SAMPLE DESIGN

In 1995, the SDR sample size was 49,829. The total sample was selected from 2 groups:

(1) 1993 sample members who were still eligible in 1995, and

(2) a sample of the 1993-94 graduating cohort.

Group 1 cases were included with certainty because they are the core sample that is conveyed from year to year; group 2 cases were sampled and added to the core sample to form the total sample. A maintenance cut was done to the sample to keep the sample size roughly the same as it was in 1993.

The basic sample design was a stratified random sample. The variables used for stratification were 15 broad fields of degree, 2 genders, and an 8-category "group" variable combining race/ethnicity, handicap status, and citizenship status.

The *overall* sampling rate was about 1 in 12 (8 percent) in the 1995 SDR, applied to a population of 594,300. However, sampling rates varied considerably within and between the strata. These differences resulted from oversampling of women, minority groups and other groups of special interest, and the accumulation of sample size adjustments over the years.

DATA COLLECTION

In 1995, there were 2 phases of data collection: a mail survey and telephone followup interviewing with nonrespondents. The mail survey consisted of an advance letter and 2 waves of a personalized mailing package, with a reminder postcard between waves 1 and 2. The first-wave mailing was sent in May 1995, with the follow-up mailing sent by priority mail in July.

Phase 2 consisted of telephone interviewing. A 60 percent sample of nonrespondents to the mail survey were followed up using computer-assisted telephone interviewing (CATI). Telephone interviewing was conducted between November 1995 and February 1996.

SURVEY DESIGN AND CONTENT

The 1995 SDR retained questionnaire design changes that were implemented in 1993. Most items on the 1995 questionnaire were the same as in 1993 with the addition of a section to collect data on employment history and periods of unemployment.

RESPONSE RATES

The overall response rate for the 1995 SDR was 85 percent. The response to the mail phase of the survey was about 62 percent. (Response rates were calculated as the weighted response divided by the weighted sample cases.)

DATA PREPARATION

As completed survey mail questionnaires were received, they were logged and transferred to the editing and coding unit at the NRC for processing. The coders carried out a variety of checks to prepare the documents for data entry. Specifically, they resolved incomplete or contradictory answers, imputed missing answers if logically appropriate, reviewed "other specify" responses for possible backcoding to a listed response, and assigned numeric codes to open-ended questions such as employer name.

Once questionnaires were edited and coded, they were sent to data entry. The data entry program contained a full complement of range and consistency checks to check for entry errors and inconsistent answers. The range and consistency checks were also applied to the CATI data via batch processing. Further computer checks were performed to test for inconsistent values; these were corrected and the process repeated until no inconsistencies remained.

At this point, the survey data file was ready for imputation of missing data. As a first step, basic frequency distributions were produced to show nonresponse rates to each question—these were generally less than 2 percent, with the exception of salary, which was 5.9 percent. Two methods for imputation were adopted. The first, cold decking, was used mainly for demographic variables that are static, i.e., not subject to change. Using this method, historical data provided by respondents in previous years were used to fill a missing response. For example, if a respondent indicated in 1993 that his birth year was 1947, but left the item blank in 1995, then "1947" was assigned to his birth year in 1995. In cases where no historical data were available, and for nondemographic variables (such as employment status, primary work activity, and salary), hot decking was used. This is the process of finding a donor with characteristics similar to the case with the missing value and using the response given by the donor as a proxy response. Hot decking involves creating groups of cases with common characteristics (through the cross-classification of auxiliary variables) and then selecting a donor at random for the case with the missing value. As a general rule, no data value was imputed from a donor in one cell to a recipient in another cell.

For a few variables, such as employer name and zip code, imputation was not performed.

WEIGHTING AND ESTIMATION

The next phase of the survey process involved weighting the survey data to compensate for unequal probabilities of selection to the sample and to adjust for the effects of unit nonresponse. The first step was the construction of sampling weights, which were calculated as the inverse of the probability of selection, taking into account all stages of the sample selection process overtime. The sampling weight can be viewed as the number of population members the sample member represents. Sampling weights varied within cells because different sampling rates were used depending on the year of selection and the stratification in effect at that time.

The second step was to construct a combined weight, which took into account the subsampling of nonrespondents at the CATI phase. All respondents received a combined weight, which for mail respondents was equal to the sample weight and for CATI respondents was a combination of their original sample weight and their CATI subsample weight.

The third step was to adjust the sampling weights for unit nonresponse. (Unit nonresponse occurs when the sample member refuses to participate or cannot be located.) This was done in a group of nonresponse adjustment cells created using poststratification. Within each nonresponse adjustment cell, a weighted nonresponse rate, which took into account both mail and CATI nonresponse, was calculated. The nonresponse adjustment factor was the inverse of this weighted response rate. The initial set of nonresponse adjustment factors was examined and, under certain conditions, some of the cells were collapsed if use of the adjustment factor would create excessive variance.

The final weights for respondents were calculated by multiplying their respective combined weights by the nonresponse adjustment factor. In data analysis, population estimates are made by summing the final weights of all respondents who possess a particular characteristic.

RELIABILITY[1]

The statistics in this report are subject to both sampling and nonsampling error. Sampling variability occurs because a sample rather than an entire population is surveyed. Sampling errors were developed using a generalized variance procedure in order to provide approximate sampling errors that would be applicable to a wide variety of items. As a result, these sampling errors provide an indication of the order of magnitude of a sampling error rather than a precise sampling error for any specific item.

Information provided in table A-3 permits the user to calculate approximate standard errors. The general form of the equation used to model the generalized variances is $V = a + b/x$, where V was modeled in relative standard error form.

The following computational form can be used for estimating the standard error of totals using the formula

$$S_x=[ax^2+bx]^{1/2}$$

where "x" equals the estimated total and "a" and "b" are the regression coefficients provided. Values of "a" and "b" by S&E fields for selected groups are given in table A-3.[2]

Tables A-4 through A-8 present approximate standard errors associated with totals for different segments of the doctoral population. Tables A-9 through A-13 present standard error estimates for the estimated percent[3] of a subgroup having a particular characteristic.

The approximate standard error of percentages also was developed using the same general model form. Standard errors for percentages may be estimated using the computational formula

$$S_p = p[b((1/x)-(1/y))]^{1/2}$$

where p equals the percentage possessing the specific characteristic and x and y represent the numerator and denominator, respectfully, of the ratio that yields the observed percentage.

In addition to sampling error, data are subject to nonsampling error. Sources of nonsampling error include nonresponse bias, which arises when individuals who do not respond to a survey differ significantly from those who do, and measurement error, which arises when we are not able to precisely measure the variables of interest. These sources of error are much harder to estimate than sampling errors.

NOTES ON THE TABLES

The following notes facilitate use of data in the detailed tables.

Because of the changes introduced to the 1993 SDR and retained in the 1995 SDR, users are advised that data in this report are not strictly comparable with SDR data published by NSF prior to 1993.

Field of doctorate is the field of degree as specified by the respondent in the Survey of Earned Doctorates at the time of degree conferral.

Occupation data were derived from responses to several questions on the kind of work done by the respondent. The occupational classification of the respondent was based on his or her principal job held during the reference week—or last job held, if not employed on the reference week (questions A18 and A5). Also used in the occupational classification was a respondent-selected job code (questions A19 and A6).

Sector of employment was based on responses to questions A13 and A15. The category "universities and 4-year colleges" includes 4-year colleges or universities, medical schools (including university-affiliated hospitals or medical centers), and university affiliated research institutions. "Private-for-Profit" includes self-employed in incorporated business.

Geographic division was based primarily on responses to question A11 on the location of employment. Individuals not reporting place of employment were classified by their mailing address.

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[1] The data and material on sampling reliability presented here are from The Methodological Report of the 1995 Survey of Doctorate Recipients (Washington, D.C. Office of Scientific and Engineering Personnel, National Research Council, forthcoming).

[2] The generalized error estimates in this report were based on a set of assumptions that did not appear to hold in the case of some small subpopulations. In such cases, the parameters listed for a higher-level field within a demographic group or a higher-level demographic group within a field were considered a useful substitute as a generalized error estimate.

[3] The estimated percent is based on the ratio of two estimated totals, where the numerator is a subset of the denominator.

Place Of Birth categories were defined as follows:

U.S. = Fifty states plus the Virgin Islands, Panama Canal Zone, Puerto Rico, American Samoa, Trust Territory, and Guam

Europe = Albania, Armenia, Austria, Belarus, Bosnia-Herzegovina, Bulgaria, Czech Republic, Croatia, Estonia, Georgia, Greece, Hungary, Latvia, Lithuania, Poland, Romania, Russia, Slovakia, Ukraine, Federal Republic of Yugoslavia, Andorra, Belgium, France, Gibraltar, Luxembourg, Monaco, The Netherlands, Portugal, Spain, Switzerland, Germany, Italy, Liechtenstein, Malta, Denmark, England, Finland, Iceland, Northern Ireland, Republic of Ireland, Norway, Scotland, Sweden, Wales, Europe, not specified

Asia = Afghanistan, Bahrain, Bangladesh, Cyprus, India, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Nepal, Palestine, Saudi Arabia, Sri Lanka, Syria, Turkey, Cambodia, People's Republic of China, Philippines, Taiwan, China Unspecified, Hong Kong, Japan, Republic of Korea, Korea Unspecified, Laos, Malaysia, Singapore, Thailand, Democratic Republic of Vietnam, Republic of Vietnam, Asia, not specified

North America = Bermuda, Canada, Greenland, North America, not specified

Central America = Belize, Costa Rica, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Central America not specified

Caribbean = Barbados, Cuba, Dominican Republic, Haiti, Jamaica, Caribbean not specified

South America = Argentina, Bolivia, Brazil, Chile, Columbia, Ecuador, French Guiana, Guyana, Paraguay, Peru, Suriname, Uruguay, Venezuela, South America, not specified

Africa = Algeria, Egypt, Ethiopia, Ghana, Kenya, Libya, Morocco, Nigeria, South Africa, Sudan, Africa, not specified

Oceania = Australia, Indonesia, New Zealand, Oceania, not specified

Primary work activity was determined from responses to question A27. "Development" includes the development of equipment, products, and systems. "Design" includes the design of equipment, processes, and models.

Federal support was determined from responses to questions A40 and A41.

Tenure status was obtained from the response to question A17.

Race/ethnicity categories of white, black, Asian/Pacific Islander and Native American refer to non-Hispanic individuals only.

Citizenship status category of Non-U.S., temporary resident does not include individuals who, at the time they received their doctorate, expressed plans to leave the U.S. These individuals were excluded from the sampling frame.

Salary data were derived from responses to question A37, in which information was requested regarding annual salary before deductions for income tax., social security, retirement, but excluding bonuses, overtime, and summer teaching. Salaries reported are median annual salaries, rounded to the nearest $100 and computed for full-time employed scientists and engineers. For individuals employed by educational institutions, no accommodation was made to convert academic-year salaries to calendar-year salaries. Users are advised that due to a wording change in the salary question, 1995 salary data are not strictly comparable with 1993 salary data.

SELECTED EMPLOYMENT CHARACTERISTICS

This report contains several derived statistical measures reflecting labor force and employment rates as of April 1995:

Labor force participation rate. The labor force is defined as those employed (E) plus those unemployed (U—i.e., those not-employed persons actively seeking work). The labor force participation rate (R_{LF}) is the ratio of the labor force to the population (P).

$$R_{LF} = (E+U) / P$$

Unemployment rate. The unemployment rate (R^{U}) is the ratio of those who are unemployed but seeking employment (U) to the total labor force (E+U).

$$R_{U} = U / (E+U)$$

S&E involuntarily out-of-field rate. The S&E involuntarily out-of-field rate is the percent of employed individuals who reported they were either:

(1) working part-time exclusively because suitable full-time work was not available; and/or

(2) working in an area not related to the first doctoral degree (in their principal job) at least partially because suitable work in the field was not available.

APPENDIXES

Table *Page*

A-1 Stratification, sample, and survey responses of doctoral scientists and engineers: 1995....... 111

A-2 Classification of occupation categories: 1995 112

A-3 Listing of a and b parameters for selected demographic groups in science and engineering fields: 1995 113

A-4 Approximate standard errors of estimated number of doctoral scientists and engineers, by field of doctorate: 1995....... 115

A-5 Approximate standard errors of estimated number of women doctoral scientists and engineers, by field of doctorate: 1995 115

A-6 Approximate standard errors of estimated number of black doctoral scientists and engineers, by field of doctorate: 1995 116

A-7 Approximate standard errors of estimated number of Asian doctoral scientists and engineers, by field of doctorate: 1995 116

A-8 Approximate standard errors of estimated number of Hispanic doctoral scientists and engineers, by field of doctorate: 1995 116

A-9 Approximate standard errors for estimated percents of doctoral scientists engineers: 1995 117

A-10 Approximate standard errors for estimated percents of women scientists and engineers: 1995 117

A-11 Approximate standard errors for estimated percents of black scientists and engineers: 1995 118

A-12 Approximate standard errors for estimated percents of Asian scientists and engineers: 1995 118

A-13 Approximate standard errors for estimated percents of Hispanic scientists and engineers: 1995 118

Table A-1. Stratification, sample, and survey responses of doctoral scientists and engineers: 1995

Page 1 of 1

Item	Sampling frame	Survey sample	Complete response	Ineligible response(1)	Non-response	Response rate(2)	Weighted response rate(3)
						(In percent)	
Total	594,275	49,829	35,370	2,946	11,513	76.9	85.4
Field of doctorate							
Chemistry	66,595	4,328	3,100	238	990	77.1	86.1
Physics/astronomy	42,898	3,368	2,396	213	759	77.5	85.4
Earth/ocean/atmospheric sciences	17,759	1,487	1,123	94	270	81.8	89.7
Mathematical sciences	28,016	2,298	1,620	176	502	78.2	86.6
Computer sciences	8,833	805	595	48	162	79.9	90.1
Agricultural sciences	28,369	2,351	1,640	198	513	78.2	87.4
Medical sciences	17,963	2,570	1,880	99	591	77.0	86.9
NIH biological sciences	66,507	9,129	6,781	357	1,991	78.2	86.9
Other biological sciences	50,713	3,541	2,639	195	707	80.0	88.3
Psychology	85,514	5,861	4,026	166	1669	71.5	81.5
Economics	23,156	1,384	888	125	371	73.2	80.6
Anthropology/archeology/sociology	24,803	1,868	1,326	139	403	78.4	87.5
Other social sciences	35,916	2,140	1,421	179	540	74.8	84.0
Electrical/electronics engineering	22,896	2,132	1,421	150	561	73.7	82.0
Other engineering	74,337	6,567	4,514	569	1484	77.4	85.2
Demographic characteristics							
U.S. Born:							
Handicapped	13,982	1,528	1,168	70	290	81.0	90.9
White	433,194	32,493	23,737	1,043	7,713	76.3	85.9
Black	7,633	1,572	1,181	34	357	77.3	80.4
Asian	6,753	1,413	974	104	335	76.3	86.6
Hispanic	5,713	1,333	992	39	302	77.3	88.0
Native American	919	280	216	7	57	79.6	85.4
Foreign Born:							
U.S. Citizen	40,283	4,235	3,043	214	978	76.9	85.6
Foreign Citizen	85,797	6,975	4,059	1,435	1,481	78.8	81.9
Sex:							
Male	471,067	37,496	26,361	2,425	8,710	76.8	85.0
Female	123,208	12,333	9,009	521	2,803	77.3	86.8
Year of Doctorate:							
1964 or Earlier	70,443	5,791	4,051	390	1,350	76.7	83.2
1965 to 1974	139,570	10,969	7,706	594	2,669	75.7	83.8
1975 to 1984	165,100	13,745	9,716	703	3,326	75.8	84.6
1985 to 1994	219,162	19,324	13,897	1,259	4,168	78.4	87.8

(1)The 2,946 ineligible responses include the following: doctorates living outside the U.S. during the week of April 15, 1995 (2,646); deceased (257); those who were institutionalized during the week of April 15, 1995 (27); over the age of 75 in April 1995 (11).

(2) The unweighted response rate is calculated as the total responses divided by the total sample.

(3) The weighted response rate is the total responses multiplied by their sample weights divided by the total sample multiplied by their sample weights. Nonrespondents to the mail that were followed-up via CATI carry an adjusted sample weight.

SOURCE: National Science Foundation/SRS, 1995 Survey of Doctorate Recipients

Table A-2. Classification of occupation categories, 1995

Page 1 of 1

Total	010-500
Computer and mathematical scientists	052-054, 088, 172-176, 276,286
Computer and information scientists	052-054, 088
Mathematical scientists	172-176
Postsecondary teachers- Computer and mathematical sciences	276,286
Life and related scientists	021-025,027,271,273,287,297
Agricultural and food scientists	021
Biological scientists	22,23,25,27
Forestry and conservation scientists	024
Postsecondary teachers- Life and related sciences	271,273,287,297
Physical and related scientists	191-196,198,275,277,289
Chemists, except biochemists	192-195
Physicists and astronomers	191,196
Other physical scientists	198
Postsecondary teachers- Physical and related sciences	275,277,289
Social and related scientists	231-233,235-237,278,290,291,293,298
Economists	232
Political scientists	235
Psychologists	236
Sociologists and anthropologists	231,237
S&T historians and other social scientists	233
Postsecondary teachers- Social and related sciences	278,290,291,293,298
Engineers	082-099
Aerospace and related engineers	082
Chemical engineers	085
Civil engineers and architectural engineers	086
Electrical and related engineers	087,089
Industrial engineers	091
Mechanical engineers	094
Other engineers	083,084,090,092,093,095-099
Postsecondary teachers- Engineering	280
Managers, administrators, etc.	141,151,152,153
Health and related occupations	111-114
Teachers, except S&E postsecondary teachers	251-257,272,274,279,281-285,288,292,294-296,299
Social services and related occupations	040,070,240
Technologists, etc.	026,051,081,100-104,175,197
Sales and marketing occupations	200-203
Other non-S&E occupations	010,031-033,110,120,130,171,221-223,234,401-405,500

SOURCE: National Science Foundation/SRS, 1995 Survey of Doctorate Recipients

Table A-3. Listing of a and b parameters for selected demographic groups in science and engineering fields: 1995

Page 1 of 2

Field of doctorate	Parameter	All	Female	White	Asian	Black	Native American	Hispanic	1993-94 Cohort	Foreign
Total	a	-0.000023	0.000021	-0.000040	-0.000008	-0.000489	-0.000259	0.000299	-0.000277	-0.000316
	b	18.5899	13.0050	20.4266	12.7529	12.4291	17.1888	12.2297	17.4728	19.4170
Sciences	a	-0.000044	0.000034	-0.000054	-0.000301	-0.000591	0.001656	0.000504	-0.000367	-0.000515
	b	21.6561	12.5028	22.4212	16.0783	12.6927	17.1112	11.5813	18.1395	21.1058
Computer and mathematical sciences	a	-0.000853	-0.000015	-0.002698	-0.002373	-0.004981	-0.150946	0.018700	-0.002501	-0.000185
	b	28.0454	5.4012	42.0849	16.1405	12.7974	9.6391	8.6377	17.1318	11.4903
Computer and information sciences	a	-0.000885	-0.001217	0.000614	-0.006329	-0.019370	0.014536	0.003246	-0.003694	0.018624
	b	9.9392	2.3555	3.9946	15.0334	15.0256	-0.0976	10.0460	14.3085	0.8335
Mathematical sciences	a	-0.000540	0.000046	0.001772	-0.004289	-0.005817	-0.098259	0.030161	-0.000516	-0.001747
	b	25.5222	5.4909	16.5930	18.5153	12.1190	6.3232	6.7742	13.4704	7.1415
Life and related sciences	a	-0.000171	-0.000366	-0.000200	0.000106	0.002809	0.042462	-0.005573	-0.000787	-0.001571
	b	21.4545	17.6003	20.7956	12.1302	4.9851	3.5054	15.4796	14.1837	18.0885
Agricultural and food sciences	a	0.000163	-0.006782	0.001017	-0.006930	-0.001434	0.042462	-0.012383	0.024752	-0.025676
	b	10.6019	20.2661	7.9515	16.2664	8.1511	3.5054	8.5916	3.9799	19.1821
Biological and health sciences	a	-0.000224	-0.000376	-0.000213	0.000466	0.003153	0.049573	-0.005760	-0.000905	-0.001462
	b	21.8288	16.7396	20.7474	11.4164	4.9506	3.4480	15.4556	13.6868	15.0375
Environmental sciences	a	-0.001686	0.074768	-0.006754	-0.001703	0.589446	0.012913	0.292197	0.058142	-0.020755
	b	16.1779	5.2488	20.0928	5.4797	-5.2662	-0.0800	-2.4694	10.9223	6.3131
Physical and related sciences	a	0.000114	0.001052	0.000150	-0.000646	-0.007952	-0.007954	0.008160	-0.001299	-0.000207
	b	10.8529	4.6941	11.9211	11.7896	14.6432	11.6577	7.6114	13.1661	8.7183
Chemistry, except biochemistry	a	0.000223	0.000755	0.000128	-0.000721	-0.012689	0.027039	0.009031	-0.005039	-0.002139
	b	15.3418	6.0265	18.4545	11.0773	15.5033	3.6410	8.5310	21.1786	13.0193
Geology and oceanography	a	-0.000973	0.002054	-0.000910	-0.005124	0.474362	0.162483	0.046690	0.007492	-0.004373
	b	17.0479	3.3279	14.7055	17.6009	-2.0383	1.8659	8.9725	5.0869	6.4656
Physics and astronomy	a	0.000261	-0.005085	0.000689	-0.001293	0.001091	0.202934	0.021614	-0.004297	-0.004409
	b	5.1938	9.1354	1.5439	8.5745	3.9319	-0.1961	2.8557	13.7771	17.7154
Other physical sciences (Incl. earth)	a	0.001490	0.060666	0.018634	0.042892	0.293921	-0.007954	0.142239	0.371915	0.214456
	b	8.1617	5.8244	2.3477	7.3602	0.7987	11.6577	1.7752	-0.7142	-4.6815

See explanatory information and SOURCE at end of table.

Table A-3: Listing of a and b parameters for selected demographic groups in science and engineering fields: 1995

Page 2 of 2

Field of doctorate	Parameter	All	Female	White	Asian	Black	Native American	Hispanic	1993-94 Cohort	Foreign
Social and related sciences	a	-0.000066	0.000006	-0.000087	0.003467	-0.000784	0.055318	0.002348	-0.002276	0.002341
	b	24.1827	19.6173	26.2486	12.9711	14.0330	2.5704	8.8686	31.1131	11.8954
Economics	a	-0.001860	-0.002993	-0.009160	0.017416	0.018669	-0.195509	0.049109	-0.013244	0.008330
	b	50.0002	11.6143	45.5894	8.7259	16.8857	12.8549	6.8511	24.1809	8.6854
Political and related sciences	a	-0.000925	0.004913	-0.000972	-0.007520	0.034105	0.155827	0.054803	-0.011663	0.004232
	b	25.0215	4.1086	21.3615	11.0090	-0.5418	-17.4856	-3.9270	11.2798	14.4068
Psychology	a	0.000101	-0.000059	0.000096	-0.014189	-0.003263	0.093760	-0.005823	-0.003076	0.004409
	b	18.3531	24.0757	19.6472	21.6614	15.1217	5.0968	17.5394	25.2727	15.2624
Sociology and anthropology	a	-0.000641	-0.000753	-0.000650	-0.000186	0.001082	0.066320	0.005582	-0.013473	-0.010160
	b	17.4264	8.0744	15.9666	5.6019	3.8273	-0.2871	4.6923	15.0009	10.6842
Other social sciences	a	-0.000633	-0.000549	-0.000424	-0.004979	0.015130	0.026521	0.000459	-0.000846	0.016087
	b	19.1413	11.9950	15.8947	26.7948	6.5850	1.0566	7.0809	11.5407	14.5094
Engineering	a	-0.000135	-0.006390	0.000044	-0.000428	0.006469	-0.038454	-0.001188	0.004499	-0.001033
	b	14.6994	23.6020	8.1550	17.1424	5.2421	17.3361	13.3388	13.4102	19.4301
Aerospace/aeronautical	a	-0.007795	-0.097285	-0.012822	-0.066937	0.151322	-0.038454	-0.034138	-0.029052	0.004493
	b	15.7897	4.6514	13.8309	22.8680	-1.1424	17.3361	2.4502	12.7274	-0.1321
Chemical	a	0.001101	-0.001088	-0.000637	0.000236	0.112882	-0.038454	-0.028280	-0.002367	0.000898
	b	5.4395	3.9492	11.0768	6.2993	4.0044	17.3361	14.6285	9.1778	1.8737
Civil	a	-0.017836	-0.001847	-0.001201	0.002871	-0.009567	0.517931	0.048866	-0.012088	-0.009090
	b	39.3848	6.2769	9.2613	3.2557	11.2200	-2.1553	6.4519	16.6786	16.7293
Electrical/computer	a	-0.000520	-0.004639	0.002209	0.006563	0.039620	0.218413	-0.010227	-0.002568	-0.002608
	b	16.4161	7.4492	2.9594	6.4722	-0.1783	4.5607	10.2778	10.1329	12.9309
Industrial	a	-0.003107	0.041131	0.024767	0.004322	-0.047322	-0.038454	-0.149059	0.132530	-0.050017
	b	15.0343	4.8166	-1.6111	4.2404	10.7387	17.3361	16.1463	-3.5348	11.4787
Mechanical	a	0.000322	-0.026791	-0.007779	-0.004174	-0.045343	-0.038454	-0.074873	-0.000142	0.001539
	b	7.0706	10.4604	20.7584	12.6009	10.4651	17.3361	15.7967	3.3455	3.3271
Other engineering	a	0.000353	-0.015372	0.000582	-0.000662	0.021109	-0.050146	0.076911	-0.001470	0.006189
	b	10.6413	18.9641	6.4912	13.8365	9.0236	2.6865	-0.4487	24.4974	9.7376

SOURCE: National Science Foundation/SRS, 1995 Survey of Doctorate Recipients

Table A-4. Approximate standard errors of estimated number of doctoral scientists and engineers by field of doctorate: 1995

Page 1 of 1

		Sciences					Engineering				
Estimated number	Total	Total	Computer and mathematical sciences	Life and related sciences	Physical and related sciences	Social and related sciences	Total	Chemical	Civil	Electrical/ Computer	Mechanical
50	30	30	40	30	20	30	30	20	40	30	20
100	40	50	50	50	30	50	40	20	60	40	30
200	60	70	70	70	50	70	50	30	80	60	40
500	100	100	120	100	70	110	90	50	120	90	60
700	110	120	140	120	90	130	100	70	140	110	70
1,000	140	150	160	150	100	160	120	80	150	130	90
2,500	220	230	250	230	170	250	190	140	--	190	140
5,000	300	330	340	320	240	350	260	230	--	260	210
10,000	430	460	440	440	350	490	370	410	--	330	320
25,000	670	720	410	660	590	750	530	--	--	--	--
50,000	930	990	--	800	910	1,020	630	--	--	--	--
75,000	1,120	1,170	--	800	1,210	1,200	590	--	--	--	--
100,000	1,270	1,310	--	660	1,490	1,330	--	--	--	--	--
150,000	1,500	1,510	--	--	--	1,470	--	--	--	--	--
200,000	1,670	1,610	--	--	--	--	--	--	--	--	--
250,000	1,780	1,640	--	--	--	--	--	--	--	--	--
300,000	1,860	1,600	--	--	--	--	--	--	--	--	--
400,000	1,920	1,300	--	--	--	--	--	--	--	--	--
500,000	1,850	--	--	--	--	--	--	--	--	--	--

KEY: '--' = Not applicable

SOURCE: National Science Foundation/SRS, 1995 Survey of Doctorate Recipients

Table A-5. Approximate standard errors of estimated number of women doctoral scientists and engineers by field of doctorate: 1995

Page 1 of 1

		Sciences					Engineering				
Estimated number	Total	Total	Computer and mathematical sciences	Life and related sciences	Physical and related sciences	Social and related sciences	Total	Chemical	Civil	Electrical/ Computer	Mechanical
50	30	30	20	30	20	30	30	10	20	20	20
100	40	40	20	40	20	40	50	20	20	30	30
200	50	50	30	60	30	60	70	--	--	40	--
500	80	80	50	90	50	100	100	--	--	--	--
700	100	90	60	110	60	120	120	--	--	--	--
1,000	110	110	70	130	80	140	130	--	--	--	--
2,500	180	180	--	200	140	220	140	--	--	--	--
5,000	260	250	--	280	220	310	--	--	--	--	--
10,000	360	360	--	370	390	440	--	--	--	--	--
25,000	580	580	--	460	--	--	--	--	--	--	--
50,000	840	840	--	--	--	--	--	--	--	--	--
75,000	1,050	1,060	--	--	--	--	--	--	--	--	--
100,000	1,230	1,260	--	--	--	--	--	--	--	--	--

KEY: '--' = Not applicable

SOURCE: National Science Foundation/SRS, 1995 Survey of Doctorate Recipients

Table A-6. Approximate standard errors of estimated number of black doctoral scientists and engineers by field of doctorate: 1995

Page 1 of 1

Estimated number	Total	Sciences					Engineering				
		Total	Computer and mathematical sciences	Life and related sciences	Physical and related sciences	Social and related sciences	Total	Chemical	Civil	Electrical/ Computer	Mechanical
50	20	30	30	20	30	30	20	20	20	10	20
100	40	40	40	20	40	40	20	--	30	20	20
200	50	50	50	30	50	50	40	--	--	40	--
500	80	80	--	60	70	80	70	--	--	--	--
700	90	90	--	70	80	100	80	--	--	--	--
1,000	110	110	--	90	80	120	--	--	--	--	--
2,500	170	170	--	--	--	170	--	--	--	--	--
5,000	220	220	--	--	--	--	--	--	--	--	--
10,000	270	--	--	--	--	--	--	--	--	--	--

KEY: '--' = Not applicable

SOURCE: National Science Foundation/SRS, 1995 Survey of Doctorate Recipients

Table A-7. Approximate standard errors of estimated number of Asian doctoral scientists and engineers by field of doctorate: 1995

Page 1 of 1

Estimated number	Total	Sciences					Engineering				
		Total	Computer and mathematical sciences	Life and related sciences	Physical and related sciences	Social and related sciences	Total	Chemical	Civil	Electrical/ Computer	Mechanical
50	30	30	30	20	20	30	30	20	10	20	20
100	40	40	40	30	30	40	40	30	20	30	30
200	50	60	60	50	50	50	60	40	30	40	50
500	80	90	90	80	80	90	90	60	50	70	70
700	90	110	100	90	90	100	110	70	60	90	80
1,000	110	130	120	110	110	130	130	80	80	110	90
2,500	180	200	160	180	160	230	200	130	--	240	--
5,000	250	270	--	250	210	--	270	--	--	--	--
10,000	360	360	--	360	230	--	360	--	--	--	--
25,000	560	460	--	--	--	--	--	--	--	--	--
50,000	790	--	--	--	--	--	--	--	--	--	--

KEY: '--' = Not applicable

SOURCE: National Science Foundation/SRS, 1995 Survey of Doctorate Recipients

Table A-8. Approximate standard errors of estimated number of Hispanic doctoral scientists and engineers by field of doctorate: 1995

Page 1 of 1

Estimated number	Total	Sciences					Engineering				
		Total	Computer and mathematical sciences	Life and related sciences	Physical and related sciences	Social and related sciences	Total	Chemical	Civil	Electrical/ Computer	Mechanical
50	20	20	20	30	20	20	30	30	20	20	20
100	40	30	30	40	30	30	40	30	30	30	30
200	50	50	50	50	40	40	50	40	--	40	--
500	80	80	90	80	80	70	80	--	--	--	--
700	90	90	120	90	100	90	90	--	--	--	--
1,000	110	110	--	100	130	110	110	--	--	--	--
2,500	180	180	--	60	--	190	--	--	--	--	--
5,000	260	270	--	--	--	--	--	--	--	--	--
10,000	390	--	--	--	--	--	--	--	--	--	--

KEY: '--' = Not applicable

SOURCE: National Science Foundation/SRS, 1995 Survey of Doctorate Recipients

Table A-9. Approximate standard errors for estimated percents of doctoral scientists and engineers: 1995

Page 1 of 1

Base number of percent	Estimated percent						
	1 or 99	2 or 98	5 or 95	10 or 90	15 or 85	25 or 75	50
50	6.1	8.5	13.3	18.3	21.8	26.4	30.5
100	4.3	6.0	9.4	12.9	15.4	18.7	21.6
200	3.0	4.3	6.6	9.1	10.9	13.2	15.2
500	1.9	2.7	4.2	5.8	6.9	8.3	9.6
700	1.6	2.3	3.6	4.9	5.8	7.1	8.1
1,000	1.4	1.9	3.0	4.1	4.9	5.9	6.8
2,500	0.9	1.2	1.9	2.6	3.1	3.7	4.3
5,000	0.6	0.9	1.3	1.8	2.2	2.6	3.0
10,000	0.4	0.6	0.9	1.3	1.5	1.9	2.2
25,000	0.3	0.4	0.6	0.8	1.0	1.2	1.4
50,000	0.2	0.3	0.4	0.6	0.7	0.8	1.0
75,000	0.2	0.2	0.3	0.5	0.6	0.7	0.8
100,000	0.1	0.2	0.3	0.4	0.5	0.6	0.7
150,000	0.1	0.2	0.2	0.3	0.4	0.5	0.6
200,000	0.1	0.1	0.2	0.3	0.3	0.4	0.5
250,000	0.1	0.1	0.2	0.3	0.3	0.4	0.4
300,000	0.1	0.1	0.2	0.2	0.3	0.3	0.4
400,000	0.1	0.1	0.1	0.2	0.2	0.3	0.3
500,000	0.1	0.1	0.1	0.2	0.2	0.3	0.3

SOURCE: National Science Foundation/SRS, 1995 Survey of Doctorate Recipients

Table A-10. Approximate standard errors for estimated percents of women scientists and engineers: 1995

Page 1 of 1

Base number of percent	Estimated percent						
	1 or 99	2 or 98	5 or 95	10 or 90	15 or 85	25 or 75	50
50	5.1	7.1	11.1	15.3	18.2	22.1	25.5
100	3.6	5.0	7.9	10.8	12.9	15.6	18.0
200	2.5	3.6	5.6	7.7	9.1	11.0	12.8
500	1.6	2.3	3.5	4.8	5.8	7.0	8.1
700	1.4	1.9	3.0	4.1	4.9	5.9	6.8
1,000	1.1	1.6	2.5	3.4	4.1	4.9	5.7
2,500	0.7	1.0	1.6	2.2	2.6	3.1	3.6
5,000	0.5	0.7	1.1	1.5	1.8	2.2	2.6
10,000	0.4	0.5	0.8	1.1	1.3	1.6	1.8
25,000	0.2	0.3	0.5	0.7	0.8	1.0	1.1
50,000	0.2	0.2	0.4	0.5	0.6	0.7	0.8
75,000	0.1	0.2	0.3	0.4	0.5	0.6	0.7
100,000	0.1	0.2	0.2	0.3	0.4	0.5	0.6

SOURCE: National Science Foundation/SRS, 1995 Survey of Doctorate Recipients

Table A-11. Approximate standard errors for estimated percents of black scientists and engineers: 1995

Page 1 of 1

Base number of percent	Estimated percent						
	1 or 99	2 or 98	5 or 95	10 or 90	15 or 85	25 or 75	50
50	5.0	7.0	10.9	15.0	17.8	21.6	24.9
100	3.5	4.9	7.7	10.6	12.6	15.3	17.6
200	2.5	3.5	5.4	7.5	8.9	10.8	12.5
500	1.6	2.2	3.4	4.7	5.6	6.8	7.9
700	1.3	1.9	2.9	4.0	4.8	5.8	6.7
1,000	1.1	1.6	2.4	3.3	4.0	4.8	5.6
2,500	0.7	1.0	1.5	2.1	2.5	3.1	3.5
5,000	0.5	0.7	1.1	1.5	1.8	2.2	2.5
10,000	0.4	0.5	0.8	1.1	1.3	1.5	1.8

SOURCE: National Science Foundation/SRS, 1995 Survey of Doctorate Recipients

Table A-12. Approximate standard errors for estimated percents of Asian scientists and engineers: 1995

Page 1 of 1

Base number of percent	Estimated percent						
	1 or 99	2 or 98	5 or 95	10 or 90	15 or 85	25 or 75	50
50	5.0	7.1	11.0	15.2	18.0	21.9	25.3
100	3.6	5.0	7.8	10.7	12.8	15.5	17.9
200	2.5	3.5	5.5	7.6	9.0	10.9	12.6
500	1.6	2.2	3.5	4.8	5.7	6.9	8.0
700	1.3	1.9	2.9	4.0	4.8	5.8	6.7
1,000	1.1	1.6	2.5	3.4	4.0	4.9	5.6
2,500	0.7	1.0	1.6	2.1	2.6	3.1	3.6
5,000	0.5	0.7	1.1	1.5	1.8	2.2	2.5
10,000	0.4	0.5	0.8	1.1	1.3	1.5	1.8
25,000	0.2	0.3	0.5	0.7	0.8	[illegible]	1.1
50,000	0.2	0.2	0.3	0.5	0.6	0.7	0.8

SOURCE: National Science Foundation/SRS, 1995 Survey of Doctorate Recipients

Table A-13. Approximate standard errors for estimated percents of Hispanic scientists and engineers: 1995

Page 1 of 1

Base number of percent	Estimated percent						
	1 or 99	2 or 98	5 or 95	10 or 90	15 or 85	25 or 75	50
50	4.9	6.9	10.8	14.8	17.7	21.4	24.7
100	3.5	4.9	7.6	10.5	12.5	15.1	17.5
200	2.5	3.5	5.4	7.4	8.8	10.7	12.4
500	1.6	2.2	3.4	4.7	5.6	6.8	7.8
700	1.3	1.9	2.9	4.0	4.7	5.7	6.6
1,000	1.1	1.5	2.4	3.3	3.9	4.8	5.5
2,500	0.7	1.0	1.5	2.1	2.5	3.0	3.5
5,000	0.5	0.7	1.1	1.5	1.8	2.1	2.5
10,000	0.3	0.5	0.8	1.0	1.2	1.5	1.7

SOURCE: National Science Foundation/SRS, 1995 Survey of Doctorate Recipients

APPENDIX B.

SURVEY QUESTIONNAIRE

1995

SURVEY OF DOCTORATE RECIPIENTS

CONDUCTED BY THE NATIONAL RESEARCH COUNCIL FOR
THE NATIONAL SCIENCE FOUNDATION

INSTRUCTIONS

Thank you for taking the time to complete this questionnaire. Directions for filling it out are provided with each question. Because not all questions will apply to everyone, you may be asked to skip certain questions.

- In order to get comparable data, we will be asking you to refer to the week of April 15, 1995 (e.g., April 9-15, 1995), when answering most questions.
- Follow all "SKIP" instructions AFTER marking a box. If no "SKIP" instruction is provided, you should continue to the NEXT question.
- Either a pen or pencil may be used.
- When answering questions that require marking a box, please use an "X".
- If you need to change an answer, please make sure that your old answer is either completely erased or clearly crossed out.

Thanks again for your help, we really appreciate it.

PART A - Employment Status During the Week of April 15, 1995

A1. Were you working for pay (or profit) during the week of April 15, 1995? This includes a postdoctoral appointment, being self-employed or temporarily absent from a job (e.g., illness, vacation, or parental leave), even if unpaid.

1 ☐ Yes → *SKIP to A7, page 2*
2 ☐ No

A2. *(IF NO)* **Did you look for work at any time during the four weeks preceding April 15, 1995 (that is, any time between March 19 and April 15, 1995)?**

1 ☐ Yes
2 ☐ No

A3. What were your reasons for not working during the week of April 15?

Mark (X) all that apply

Year Retired

1 ☐ Retired → 19 __|__
2 ☐ On layoff from a job
3 ☐ Student
4 ☐ Family responsibilities
5 ☐ Chronic illness or permanent disability
6 ☐ Suitable job not available
7 ☐ Did not need or want to work
8 ☐ Other - *Specify*

____

____

A4. Prior to the week of April 15, 1995, when did you last work for pay (or profit)?

If never worked for pay (or profit) mark (X) in this box → ☐ *and SKIP to Part D, page 13*

	Month		Year
LAST WORKED:	__|__	19	__|__

A5. What kind of work were you doing on this last job--that is, what was your occupation? *Please be as specific as possible, including any area of specialization.*

Example: College Professor - Electrical Engineering

____

____

____

A6. Using the JOB CATEGORIES LIST (pages 16-17), choose the code that BEST describes the work you were doing on this last job.

CODE

__|__|__ → *SKIP to A49, page 8*

122

A7. *(IF WORKED DURING WEEK OF APRIL 15TH)* **Counting *all* jobs held during the week of April 15, 1995, did you USUALLY work ...**

1 ☐ A total of 35 or more hours per week → *SKIP to A10*

2 ☐ Fewer than 35 hours per week

A8. *(IF FEWER THAN 35 HOURS)* **During the week of April 15, did you want to work a full-time work week of 35 or more hours?**

1 ☐ Yes

2 ☐ No

A9. What were your reasons for working a part-time work week (i.e., less than 35 hours) the week of April 15?

Mark (X) all that apply

1 ☐ Retired or semi-retired → 19 ___|___ Year

2 ☐ Student

3 ☐ Family responsibilities

4 ☐ Chronic illness or permanent disability

5 ☐ Suitable full-time work week job not available

6 ☐ Did not need or want to work full-time

7 ☐ Other - *Specify*

____

____

SKIP to A11

A10. *(IF 35 OR MORE HOURS)* **Although you were working during the week of April 15, had you previously RETIRED from any position?**

Examples of retirement include mandatory retirement, early retirement, or voluntary retirement

1 ☐ Yes → 19 ___|___ Year Retired

2 ☐ No

Please answer the next series of questions for your PRINCIPAL job held during the week of April 15, 1995. A second job, if held, will be covered later.

A11. Who was your principal employer during the week of April 15, 1995?

IF MORE THAN ONE JOB: Record employer for whom you worked the most hours that week

IF EMPLOYER HAD MORE THAN ONE LOCATION: Record location where you usually worked

Employer Name ______________________

City/Town ______________________

State/Foreign Country ______________________

Zip Code ______________________

A12. Counting all locations where this employer operates, how many people work for your principal employer? Your best estimate is fine.

Mark (X) one

1 ☐ Under 10 employees
2 ☐ 10-24 employees
3 ☐ 25 to 99 employees
4 ☐ 100-499 employees
5 ☐ 500-999 employees
6 ☐ 1,000-4,999 employees
7 ☐ 5,000+ employees

123

A13. Was your principal employer during the week of April 15 . . .

IF EMPLOYER WAS A SCHOOL: Mark (X) the type of organizational charter (e.g., mark "State government" for state schools, most private schools are "private not-for-profit")

Mark (X) one

1 ☐ A PRIVATE-FOR-PROFIT company, business or individual, working for wages, salary or commissions
2 ☐ A PRIVATE NOT-FOR-PROFIT, tax-exempt, or charitable organization
3 ☐ SELF-EMPLOYED in own NOT INCORPORATED business, professional practice, or farm
4 ☐ SELF-EMPLOYED in own INCORPORATED business, professional practice, or farm
5 ☐ Local GOVERNMENT (city, county, etc.)
6 ☐ State GOVERNMENT
7 ☐ U.S. military service, active duty or Commissioned Corps (e.g., USPHS, NOAA)
8 ☐ U.S. GOVERNMENT (civilian employee)
9 ☐ Other - *Specify*

____

A14. Was your principal employer an educational institution?

1 ☐ Yes
2 ☐ No → *SKIP to A18*

A15. *(IF EDUCATIONAL INSTITUTION)* **Was this educational institution...**

Mark (X) one

1 ☐ A preschool, elementary, or middle school or system → *SKIP to A18*
2 ☐ A secondary school or system → *SKIP to A18*
3 ☐ A 2-year college, junior college, or technical institute
4 ☐ A 4-year college or university, other than a medical school
5 ☐ A medical school (including university-affiliated hospital or medical center)
6 ☐ A university-affiliated research institute
7 ☐ Other - *Specify*

____

A16. What was your faculty rank?

Mark (X) one

1 ☐ Not applicable at this institution
2 ☐ Not applicable for my position
3 ☐ Professor
4 ☐ Associate Professor
5 ☐ Assistant Professor
6 ☐ Instructor
7 ☐ Lecturer
8 ☐ Adjunct Faculty
9 ☐ Other - *Specify*

____

A17. What was your tenure status?

Mark (X) one

1 ☐ Not applicable: no tenure system at this institution
2 ☐ Not applicable: no tenure system for my position
3 ☐ Tenured
4 ☐ On tenure track but not tenured
5 ☐ Not on tenure track

A18. What kind of work were you doing on your principal job held during the week of April 15, 1995–that is, what was your occupation? *Please be as specific as possible, including any area of specialization.*

Example: College Professor - Electrical engineering

____

____

A19. Using the JOB CATEGORIES LIST (pages 16-17), choose the code that BEST describes the work you were doing on your principal job during the week of April 15.

CODE

124

A20. Did you record job code "141" (manager, executive, or administrator) in A19?

1 ☐ Yes

2 ☐ No → *SKIP to A22*

A21. *(IF YES)* **Did your duties on this job require the technical expertise of a bachelor's degree or higher in -**

Mark (X) Yes or No for each

	Yes	No
1. Engineering, computer science, math or the natural sciences	1 ☐	2 ☐
2. The social sciences	1 ☐	2 ☐
3. Some other field (for example, health or business) - *Specify*	1 ☐	2 ☐

____

A22. During what month and year did you start this job (that is, your principal job held during the week of April 15, 1995)?

JOB STARTED __|__ 19 __|__
Month Year

A23. As of the week of April 15, were you licensed or certified in your occupation?

Do NOT include academic degrees (e.g., BA, MA, PhD)

1 ☐ Yes

2 ☐ No

A24. Thinking about the relationship between your work and your education, to what extent was your work on your principal job held during the week of April 15 related to your first doctoral degree awarded in the U.S.? Was it . . .

Mark (X) one

1 ☐ Closely related → *SKIP to A27, page 5*

2 ☐ Somewhat related → *SKIP to A27, page 5*

3 ☐ Not related

A25. *(IF NOT RELATED)* **Did these factors influence your decision to work in an area OUTSIDE THE FIELD OF YOUR FIRST U.S. DOCTORAL DEGREE?**

Mark (X) Yes or No for each

	Yes	No
1. Pay, promotion opportunities	1 ☐	2 ☐
2. Working conditions (hours, equipment, working environment)	1 ☐	2 ☐
3. Job location	1 ☐	2 ☐
4. Change in career or professional interests	1 ☐	2 ☐
5. Family-related reasons (children, spouse's job moved)	1 ☐	2 ☐
6. Job in doctoral degree field not available	1 ☐	2 ☐
7. Other reason - *Specify*	1 ☐	2 ☐

____

A26. Which TWO factors in A25 represent your MOST important reasons for working in an area outside the field of your first U.S. doctoral degree? *Enter number of appropriate REASONS from A25 above.*

1.______ MOST important reason

2.______ SECOND MOST important reason (Enter "0" if no second most)

125

A27. The next question is about your work activities on your principal job. Which of the following work activities occupied 10 percent or more of your time during a TYPICAL work week on this job?

Mark (X) Yes or No for each	**Yes** ↓	**No** ↓
1. Accounting, finance, contracts	1 ☐	2 ☐
2. Applied research - study directed toward gaining scientific knowledge to meet a recognized need	1 ☐	2 ☐
3. Basic research - study directed toward gaining scientific knowledge primarily for its own sake	1 ☐	2 ☐
4. Computer applications, programming, systems development	1 ☐	2 ☐
5. Development - using knowledge gained from research for the production of materials, devices	1 ☐	2 ☐
6. Design of equipment, processes, structures, models	1 ☐	2 ☐
7. Employee relations - including recruiting, personnel development, training	1 ☐	2 ☐
8. Managing and supervising	1 ☐	2 ☐
9. Production, operations, maintenance (e.g., truck driving, machine tooling, auto/machine repairing)	1 ☐	2 ☐
10. Professional services (health care, counseling, financial services, legal services, etc.)	1 ☐	2 ☐
11. Sales, purchasing, marketing, customer service, public relations	1 ☐	2 ☐
12. Quality or productivity management	1 ☐	2 ☐
13. Teaching	1 ☐	2 ☐
14. Other - *Specify* ↓	1 ☐	2 ☐

____

A28. On which TWO activities in A27, did you work the MOST hours during a typical week on this job? *Enter number of appropriate ACTIVITY from A27 above.*

1. ___|___ Activity MOST hours
2. ___|___ Activity SECOND MOST hours (Enter "0" if no second most)

A29. In A28, did you record "2" or "3" or "5" or "6" (applied/basic research or development/design)?

1 ☐ Yes
2 ☐ No → *Skip to A31*

A30. *(IF YES)* **In what field was your research-related work being conducted?**

Field: ______________________________

____

A31. During a typical week on this job, in which, if any, of the following areas or technologies, were you working?

Mark (X) Yes or No for each	**Yes** ↓	**No** ↓
1. Flexible manufacturing, robotics	1 ☐	2 ☐
2. Advanced materials	1 ☐	2 ☐
3. Biotechnology	1 ☐	2 ☐
4. Micro or opto-electronics, Semiconductor devices	1 ☐	2 ☐
5. High performance computing	1 ☐	2 ☐
6. Software producibility	1 ☐	2 ☐
7. Sensor and signal processing	1 ☐	2 ☐

A32. Since April 1990, how many ...

If NONE, enter "0"

	Number
1. Papers have you authored or co-authored for presentation at regional, national or international conferences? (Do not count presentations of the same work more than once)	______
2. Articles that you have authored or co-authored have been accepted for publication in a refereed professional journal?	______

A33. Since April 1990, have you been named as an inventor on any application for a U.S. patent?

1 ☐ Yes
2 ☐ No → *SKIP to A35*

A34. *(IF YES)* **Since April 1990 . . .**

	Number
1. How many applications for U.S. patents have named you as inventor?	______
2. How many U.S. patents have been granted to you as an inventor?	______
3. How many of the patents recorded as GRANTED (recorded in category 2 above) have resulted in commercialized products or processes or have been licensed?	______

A35. Did you supervise the work of others as part of your principal job held during the week of April 15, 1995?

Answer "YES" if you assigned duties to workers AND recommended or initiated personnel actions such as hiring, firing, or promoting

TEACHERS: Do NOT count students

1 ☐ Yes
2 ☐ No → *SKIP to A37*

A36. *(IF YES)* **How many people did you typically...**

IF NONE, enter "0"

	Number supervised
1. supervise DIRECTLY?	______
2. supervise through subordinate supervisors?	______

A37. Before deductions, what was your basic ANNUAL salary on this job as of the week of April 15, 1995? (Do NOT include bonuses, overtime, or additional compensation for summertime teaching or research)

IF NOT SALARIED, please estimate your earned income, excluding business expenses.

$ ____________________ .00

Basic Annual Salary/Earned Income

A38. During a typical week on this job, how many hours did you usually work?

Number of Hours Per Week ______

A39. Including paid vacation and paid sick leave, upon how many weeks per year was your salary based?

Number of Weeks Per Year ______

A40. During the week of April 15, 1995, was any of your work on this job supported by CONTRACTS OR GRANTS from the U.S. government?

FEDERAL EMPLOYEES, please answer "No"

Mark (X) one

1 ☐ Yes
2 ☐ No → *SKIP to A42, page 7*
3 ☐ Don't know → *SKIP to A42, page 7*

A41. *(IF YES)* **Which Federal agencies or departments were supporting your work?**

Mark (X) all that apply

1 ☐ Agency for International Development (AID)
2 ☐ Agriculture Department
3 ☐ Commerce Department
4 ☐ Defense Department (DOD)
5 ☐ Department of Education (include NCES, OERI, FIPSE, FIRST)
6 ☐ Energy Department (DOE)
7 ☐ Environmental Protection Agency (EPA)
8 ☐ Health and Human Services Department (EXCLUDING NIH)
9 ☐ Interior Department
10 ☐ National Aeronautics and Space Administration (NASA)
11 ☐ National Institutes of Health (NIH)
12 ☐ National Science Foundation (NSF)
13 ☐ Transportation Department (DOT)
14 ☐ Other - *Specify*

____

15 ☐ DON'T KNOW SOURCE AGENCY

127

The following 3 questions provide information for the U.S. Department of Energy

A42. From the following list of selected areas, indicate the ONE area, if any, to which you devoted the MOST hours during a typical week on this job.

Mark (X) one

1 ☐ Energy or Fuel
2 ☐ Environment
3 ☐ Food or Agriculture
4 ☐ Health or Safety
5 ☐ National Defense
6 ☐ Transportation
7 ☐ NONE OF THE ABOVE

(2–7) → *SKIP to A45*

A43. *(IF ENERGY OR FUEL)* **From the following list, indicate the ONE ENERGY SOURCE that involved the largest proportion of your energy-related work during the past year.**

Mark (X) one

1 ☐ Coal
2 ☐ Petroleum and natural gas
3 ☐ Nuclear fission
4 ☐ Nuclear fusion
5 ☐ Hydroenergy
6 ☐ Other renewables (such as solar, biomass, wind, geothermal)
7 ☐ Other energy source - *Specify*

____

A44. From the following list, indicate the ONE ENERGY-RELATED ACTIVITY that involved the largest proportion of your energy-related work during the past year.

Mark (X) one

1 ☐ Exploration and extraction
2 ☐ Manufacture of energy-related equipment
3 ☐ Fuel processing (include refining and enriching)
4 ☐ Electric power generation and transmission
5 ☐ Transportation and distribution of fuel
6 ☐ Waste management or decommissioning
7 ☐ Conservation, utilization, management or storage of energy or fuel
8 ☐ Environment, health, and safety
9 ☐ Other energy-related activity - *Specify*

____

A45. During the week of April 15, 1995, were you working for pay (or profit) at a second job (or business), including part-time, evening, or weekend work?

1 ☐ Yes
2 ☐ No → *SKIP to A49, page 8*

A46. *(IF YES)* **What kind of work were you doing at your second job during the week of April 15--that is, what was your occupation?** *Please be as specific as possible, including any area of specialization.*

Example: College professor - Electrical engineering

IF YOU HAD MORE THAN TWO JOBS that week answer for the job where you worked the second most hours

____

____

A47. Using the JOB CATEGORIES LIST (pages 16-17) choose the code that BEST describes the work you were doing on your second job during the week of April 15.

CODE __|__|__

A48. To what extent was your work on this second job related to your first doctoral degree awarded in the U.S.? Was it -

Mark (X) one

1 ☐ Closely related
2 ☐ Somewhat related
3 ☐ Not related

128

Questions A49-A51 ask about your work for pay (or profit) in 1994

A49. Turning now to 1994, including paid vacation and paid sick leave, how many weeks did you work in 1994?

IF NONE, MARK (X) THIS BOX → ☐
AND SKIP TO B1

Number of Weeks Worked ________

A50. During the weeks you worked in 1994, how many hours a week did you usually work?

Number of Hours Worked ________

A51. Counting all jobs held, what was your TOTAL EARNED income, BEFORE deductions, for 1994?

Include all wages, salaries, bonuses, overtime, commissions, consulting fees, net income from business, summertime teaching or research, post doctoral appointment, or other work associated with scholarships.

$ .00

Total 1994 Earned Income

IF YOU HAD NO EARNED
INCOME IN 1994, MARK (X) THIS BOX → ☐

PART B - Past Employment

The next few questions will help us better understand employment changes over time.

B1. Were you working for pay (or profit) during BOTH of these time periods--the week of April 15, 1993 AND the week of April 15, 1995?

If you were a STUDENT: Do NOT count financial aid awards with no work requirement.

1 ☐ Yes
2 ☐ No → *SKIP to Part C, page 9*

B2. *(IF YES)* **During these two time periods--the week of April 15, 1993 and the week of April 15, 1995--were you working for . . .**

Mark (X) one

1 ☐ Same employer AND same job → *SKIP to Part C, page 9*
2 ☐ Same employer BUT different job
3 ☐ Different employer BUT same job
4 ☐ Different employer AND different job

B3. *(IF DIFFERENT)* **Why did you change your employer or your job?**

Mark (X) Yes or No for each

	Yes ↓	No ↓
1. Pay, promotion opportunities	1 ☐	2 ☐
2. Working conditions (hours, equipment, working environment)	1 ☐	2 ☐
3. Job location	1 ☐	2 ☐
4. Change in career or professional interests	1 ☐	2 ☐
5. Family-related reasons (e.g., children, spouse's job moved)	1 ☐	2 ☐
6. School-related reasons (e.g., returned to school, completed a degree)	1 ☐	2 ☐
7. Laid off or job terminated (includes company closings, mergers, buyouts)	1 ☐	2 ☐
8. Retired	1 ☐	2 ☐
9. Other - *Specify*	1 ☐	2 ☐

____

____

129

PART C - Other Work Related Information

The next few questions ask about your work experience since completing your (first) doctoral degree.

C1. Please review the JOB CATEGORIES LIST on pages 16-17. Using that list, please record codes in Column 1 for those job categories where you have had ONE OR MORE YEARS OF WORK EXPERIENCE since completing your (first) doctoral degree (a single job category code can represent several jobs). Next, complete Columns 2-5 for each job category recorded in Column 1.

Example: Chris was a regional sales director for a computer hardware company between 1980 and 1986. In 1986 she was offered a job teaching marketing at a local college, something she had always wanted to try and that would allow more time with her family. Between 1986 and 1995, she had taught at three different colleges. Chris would enter:

Row	**Col 1**	**Col 2**	**Col 3**	**Col 4**	**Col 5**
First	141	*Sales Director, computer hardware company*	1980 and 1986	6 years	3, 4
Second	274	*Professor - Marketing*	1986 and 1995	9 years	9

WORK EXPERIENCE SINCE (FIRST) DOCTORAL DEGREE

Col 1 Job Category Codes (pages 16-17) *Group jobs by job category codes, only use a job category code ONCE* *If more than 3 job category codes apply: Pick the 3 where you have worked the longest*	**Col 2 Brief Description of Work Done**	**Col 3 Starting and Ending Dates** *Working continually in the same job category between the two dates is not necessary*	**Col 4 Total Years of Work Experience** *Estimate using full-time equivalency (FTE)*	**Col 5 Two Most Important Reasons for Leaving** *Write appropriate numbers from the "Reasons for Leaving" box below*
1 CODE ___ ___	______ ______ ______	FROM 19 ___ ___ TO 19 ___ ___	___ ___ Year(s)	☐ Most important ☐ 2nd Most important (Specify for category 10) ______ ______
2 CODE ___ ___	______ ______ ______	FROM 19 ___ ___ TO 19 ___ ___	___ ___ Year(s)	☐ Most important ☐ 2nd Most important (Specify for category 10) ______ ______
3 CODE ___ ___	______ ______ ______	FROM 19 ___ ___ TO 19 ___ ___	___ ___ Year(s)	☐ Most important ☐ 2nd Most important (Specify for category 10) ______ ______

REASONS FOR LEAVING (for use in Column 5 above)

1. Pay, promotion, benefits
2. Working conditions (hours, equipment, working environment)
3 Change in career/professional interests
4. Family (children, spouse's job moved)
5. School (completed degree, returned to school, etc.)
6. Did not enjoy the work
7. Job ended/suitable job in my field not available
8. Retired
9. Still working in that field
10. Other - Specify above

C2. Since completing your (first) doctoral degree, have you had any periods of 6 months or more where you were not working?

1 ☐ Yes
2 ☐ No → *SKIP to C4*

C3. *(IF YES)* **Please provide the following information for each period of 6 months or longer. Your best guess is fine.**

DATES NOT WORKING — **REASONS FOR NOT WORKING -** *Mark (X) all that apply*

	FROM Month	FROM Year	TO Month	TO Year	Retired	Layoff/Job Ended (Company Closed)	Full-Time Student Not Working	Family Responsibilities	Chronic Illness or Permanent Disability	Suitable Job Not Available	Did Not Need or Want to Work	Other
1	__|__	19__|__	__|__	19__|__	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	6 ☐	7 ☐	8 ☐
2	__|__	19__|__	__|__	19__|__	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	6 ☐	7 ☐	8 ☐
3	__|__	19__|__	__|__	19__|__	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	6 ☐	7 ☐	8 ☐

C4. How much would (or does) your work benefit from each of the following?

Mark (X) one for each

	A Great Deal ↓	Somewhat ↓	Not At All ↓
1. Long distance communications with colleagues outside the U.S. (e.g., by letter, telephone, e-mail, fax, etc.)	1 ☐	2 ☐	3 ☐
2. Short-term visits to non-U.S. locations (days or weeks in duration)	1 ☐	2 ☐	3 ☐
3. Long-term visits to non-U.S. locations (6-months to 1 or 2 years in duration)	1 ☐	2 ☐	3 ☐

C5. Since completing your doctorate, have you ever traveled outside the United States to work or conduct research in your field?

DO NOT include international conferences.

1 ☐ Yes → *Go to C6*
2 ☐ No → *SKIP to C7*

C6. *(IF YES)* **How long was your last trip outside the United States to work or conduct research?**

1 ☐ Less than 7 days
2 ☐ 7 to 30 days
3 ☐ 1 to 6 months
4 ☐ More than 6 months

→ *SKIP to C8, page 11*

C7. *(IF NO)* **Why haven't you worked or conducted research outside the United States?**

Mark (X) all that apply

1 ☐ Not relevant to my career
2 ☐ No interest
3 ☐ No time
4 ☐ Unable to identify host institution
5 ☐ Concerned about losing my place in U.S. job market
6 ☐ Unaware of funding sources
7 ☐ Lack of foreign language skills
8 ☐ Family-related reasons
9 ☐ Other - *Specify:* ↓

____

C8. **Since completing your (first) doctoral degree how many "postdocs," if any, have you held? A "postdoc" (postdoctoral appointment) is a temporary position awarded in academe, industry, or government primarily for gaining additional education and training in research.**

NUMBER ________

OR IF NONE, MARK THIS BOX → ☐ *AND SKIP to C12*

C9. **Please provide the following information for each postdoc recorded in C8. Please include any postdocs you might currently hold.**

MOST RECENT OR CURRENT POSTDOC	SECOND MOST RECENT POSTDOC	THIRD MOST RECENT POSTDOC
A. Date postdoc started and ended (or you left) IF CURRENTLY IN POSTDOC: Enter "00" for year ended	**A. Date postdoc started and ended (or you left)**	**A. Date postdoc started and ended (or you left)**
Month **Year**	**Month** **Year**	**Month** **Year**
Started: __|__ **19** __|__	**Started:** __|__ **19** __|__	**Started:** __|__ **19** __|__
Ended: __|__ **19** __|__	**Ended:** __|__ **19** __|__	**Ended:** __|__ **19** __|__
B. What was your primary reason for taking this postdoc? *Mark (X) one*	**B. What was your primary reason for taking this postdoc?** *Mark (X) one*	**B. What was your primary reason for taking this postdoc?** *Mark (X) one*
1☐ Additional training in PhD field	1☐ Additional training in PhD field	1☐ Additional training in PhD field
2☐ Training in an area outside of PhD field	2☐ Training in an area outside of PhD field	2☐ Training in an area outside of PhD field
3☐ Work with a specific person or place	3☐ Work with a specific person or place	3☐ Work with a specific person or place
4☐ Other employment not available	4☐ Other employment not available	4☐ Other employment not available
5☐ Other - *Specify* ________	5☐ Other - *Specify* ________	5☐ Other - *Specify* ________
C. In what field were you working? Please be as specific as possible.	**C. In what field were you working? Please be as specific as possible.**	**C. In what field were you working? Please be as specific as possible.**
D. What sector BEST describes where you worked . . . Mark (X) one	**D. What sector BEST describes where you worked . . .** Mark (X) one	**D. What sector BEST describes where you worked . . .** Mark (X) one
1☐ Educational Institution	1☐ Educational Institution	1☐ Educational Institution
2☐ Business/Industry	2☐ Business/Industry	2☐ Business/Industry
3☐ Government (any level)	3☐ Government (any level)	3☐ Government (any level)
4☐ Other - *Specify* ________	4☐ Other - *Specify* ________	4☐ Other - *Specify* ________
E. For this postdoc, did you receive . . .	**E. For this postdoc, did you receive . . .**	**E. For this postdoc, did you receive . . .**
Health benefits? ... 1 ☐ Yes 2 ☐ No	Health benefits? ... 1 ☐ Yes 2 ☐ No	Health benefits? ... 1 ☐ Yes 2 ☐ No
Pension benefits? . 1 ☐ Yes 2 ☐ No	Pension benefits? . 1 ☐ Yes 2 ☐ No	Pension benefits? . 1 ☐ Yes 2 ☐ No
F. Was this postdoc the result of winning a national competition?	**F. Was this postdoc the result of winning a national competition?**	**F. Was this postdoc the result of winning a national competition?**
1☐ Yes	1☐ Yes	1☐ Yes
2☐ No	2☐ No	2☐ No

C10. Was your principal job during the week of April 15 a postdoc position?

1 ☐ Yes → *SKIP to C12*

2 ☐ No

C11. How relevant was your (most recent) postdoc to your work on your principal job held during the week of April 15?

IF NOT WORKING FOR PAY OR PROFIT THE WEEK OF APRIL 15: Use your "last job"

Mark (X) one for each

	A Great Deal ↓	Some-what ↓	Not At All ↓
1. Subject matter knowledge or expertise?	1 ☐	2 ☐	3 ☐
2. Use of specific skills or techniques?	1 ☐	2 ☐	3 ☐
3. Contacts established with colleagues in your field?	1 ☐	2 ☐	3 ☐
4. Use of specialized equipment?	1 ☐	2 ☐	3 ☐
5. General approach or problem solving skills?	1 ☐	2 ☐	3 ☐
6. Something else? - *Specify*	1 ☐	2 ☐	3 ☐

C12. During the past year, did you attend any professional society or association meetings or conferences?

Include regional, national, or international meetings

1 ☐ Yes

2 ☐ No

C13. To how many national or international professional societies or associations do you currently belong?

Number

__|__ **OR** ☐ NONE

C14. During the past year, did you attend any WORK-RELATED workshops, seminars, or other work-related training activities?

Do NOT include college courses - these will be discussed in PART D.

Do NOT include professional meetings unless you attended a special training session conducted at the meeting/conference.

1 ☐ Yes → GO to C15

2 ☐ No → *SKIP to Part D, page 13*

C15. ***(IF YES)*** **During the past year, in which of the following areas did you attend work-related workshops, seminars, or other work-related training activities?**

Mark (X) Yes or No for each

	Yes ↓	No ↓
1. Management or supervisor training	1 ☐	2 ☐
2. Training in your occupational field	1 ☐	2 ☐
3. General professional training (e.g., public speaking, business writing)	1 ☐	2 ☐
4. Other work-related training - *Specify*	1 ☐	2 ☐

C16. For which of the following reasons did you attend training activities during the past year?

Mark (X) Yes or No for each

	Yes ↓	No ↓
1. To facilitate a change in your occupational field	1 ☐	2 ☐
2. To gain FURTHER skills or knowledge in your occupational field	1 ☐	2 ☐
3. For licensure/certification	1 ☐	2 ☐
4. To increase opportunities for promotion/advancement/higher salary	1 ☐	2 ☐
5. To learn skills or knowledge needed for a recently acquired position	1 ☐	2 ☐
6. Required or expected by employer	1 ☐	2 ☐
7. Other - *Specify*	1 ☐	2 ☐

C17. What was your most important reason for attending training activities? *Enter number of appropriate REASON from C16 above*

_____ Most IMPORTANT REASON from C16

PART D - Background Information

D1. Between April 1993 and April 1995, did you take any college or university courses or enroll in a college or university for other reasons, such as completing another Master's or PhD?

1 ☐ Yes

2 ☐ No → *SKIP to D10, page 14*

D2. *(IF YES)* **In which college or university department were you primarily taking classes or doing research, etc., (e.g., English, chemistry)?**

DEPARTMENT: ____________________

D3. Between April 1993 and April 1995, did you complete a degree or certificate?

1 ☐ Yes

2 ☐ No → *SKIP to D7*

D4. *(IF YES)* **In what month and year was this degree or certificate awarded?**

IF YOU COMPLETED MORE THAN ONE: Enter the date for the highest degree or certificate awarded

__|__ 19 __|__

Month Year

D5. What type of degree or certificate did you receive?

IF MORE THAN ONE APPLIES: Mark the highest level

Mark (X) one

1 ☐ Bachelor's degree

2 ☐ Post baccalaureate certificate

3 ☐ Master's degree (including MBA)

4 ☐ Post master's certificate

5 ☐ Doctorate

6 ☐ Other professional degree (e.g., JD, LLB, THD, MD, DDS, etc.)

7 ☐ Other - *Specify*

____

D6. From which academic institution did you receive this degree or certificate?

School name: ____________________

City/Town: ____________________

State/Foreign country: ____________________

D7. What was your primary field of study during that time?

IF NO PRIMARY FIELD OF STUDY, MARK (X) THIS BOX → ☐

Primary Field of Study: ____________________

D8. For which of the following reasons were you taking classes or enrolled between April 1993 and April 1995?

Mark (X) Yes or No for each	**Yes**	**No**
1. To gain further education before beginning a career	1 ☐	2 ☐
2. To prepare for graduate school	1 ☐	2 ☐
3. To change your academic or occupational field	1 ☐	2 ☐
4. To gain FURTHER skills or knowledge in your academic or occupational field	1 ☐	2 ☐
5. For licensure/certification	1 ☐	2 ☐
6. To increase opportunities for promotion/advancement/higher salary	1 ☐	2 ☐
7. Required or expected by employer	1 ☐	2 ☐
8. For leisure/personal interest	1 ☐	2 ☐
9. Other- *Specify*	1 ☐	2 ☐

____

D9. Were ANY of your school-related costs for taking college or university courses during this time paid by an employer?

1 ☐ Yes

2 ☐ No

134

D10. As of the week of April 15 were you -

Mark (X) one

1 ☐ Married
2 ☐ Widowed
3 ☐ Separated
4 ☐ Divorced
5 ☐ Never Married

Widowed, Separated, Divorced, Never Married → *SKIP to D13*

D11. *(IF MARRIED)* **During the week of April 15, was your spouse working for pay (or profit) at a full-time or part-time job?**

1 ☐ Yes, full-time
2 ☐ Yes, part-time
3 ☐ No → *SKIP to D13*

D12. *(IF YES)* **Did your spouse's duties on this job require the technical expertise of a bachelor's degree or higher in . . .**

Mark (X) Yes or No for each	**Yes** ↓	**No** ↓
1. Engineering, computer science, math, or the natural sciences	1 ☐	2 ☐
2. The social sciences	1 ☐	2 ☐
3. Some other field (e.g., health or business) - *Specify* ↓ ...	1 ☐	2 ☐

____

D13. During the week of April 15, did you have any children living with you as part of your family?

Only count children who lived with you at least 50 percent of the time.

1 ☐ Yes → *GO to D14*
2 ☐ No → *SKIP to D15*

D14. *(IF YES)* **How many of these children living with you as part of your family were -**

If no children in a category, enter "0"	Number of children
1. Under age 2	________
2. Aged 2-5	________
3. Aged 6-11	________
4. Aged 12-17	________
5. Aged 18 or older	________

D15. During the week of April 15, 1995, were you living in the United States or one of its territories or were you living in another country?

1 ☐ United States or one of its territories
2 ☐ Another country

D16. As of the week of April 15, were you a . . .

Mark (X) one

U.S. Citizen

1 ☐ Native Born
2 ☐ Naturalized

Native Born, Naturalized → *SKIP to D18*

Non-U.S. Citizen

1 ☐ With a Permanent U.S. Resident Visa
2 ☐ With a Temporary U.S. Resident Visa
3 ☐ Living outside the United States

D17. *(IF A NON-U.S. CITIZEN)* **Of which country are you a citizen?**

COUNTRY: ______________________

D18. What is your birthdate?

____|____ Month ____|____ Day **19** ____|____ Year

The next question is designed to help us better understand the career paths of individuals with different physical abilities.

D19. What is the USUAL degree of difficulty you have with -

MARK (X) ONE FOR EACH

	None	Slight	Moderate	Severe	Unable to Do
1. SEEING words or letters in ordinary newsprint (with glasses/contact lenses if you usually wear them)	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
2. HEARING what is normally said in conversation with another person (with a hearing aid, if you usually wear one)	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
3. WALKING without human or mechanical assistance or using stairs	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
4. LIFTING or carrying something as heavy as 10 pounds, such as a bag of groceries	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐

D20. If you answered "none" TO ALL ACTIVITIES in D19, Mark (X) this box → ☐ and SKIP to D22

D21. What is the earliest age at which you FIRST began experiencing ANY difficulties in any of these areas?

AGE: ______ **OR** ☐ SINCE BIRTH

D22. In case we need to clarify some of the information you have provided, please list a phone number (and fax number and email address if applicable) where you can be reached.

Daytime: Area Code ☐☐☐ – Number ☐☐☐ – ☐☐☐☐ Evening: Area Code ☐☐☐ – Number ☐☐☐ – ☐☐☐☐

Fax Number: ☐☐☐ – ☐☐☐ – ☐☐☐☐ Email Address

D23. Since we are interested in how education and employment change over time, we may be recontacting you in 1997. To help us contact you, please provide the name, address, and telephone number of a person who is likely to know where you can be reached. DO NOT INCLUDE SOMEONE WHO LIVES IN YOUR HOUSEHOLD.

As with all the information provided in this questionnaire, complete confidentiality will be provided. This person will only be contacted if we have trouble contacting you in 1997.

First Name MI Last Name

Number and Street

City/town State Zip Code

Country (if outside U.S.)

☐☐☐ – ☐☐☐ – ☐☐☐☐
Area Code Number

D24. PLEASE TURN TO THE BACK COVER FOR THE LAST QUESTION (D25).

JOB CATEGORIES LIST

This list is ordered ALPHABETICALLY. The titles in bold type are broad job categories. To make sure you have found the BEST code, please review ALL broad categories before making your choice. If you cannot find the code that BEST describes your job, use the "OTHER" code under the most appropriate broad category in bold print. If none of the codes fit your job, use Code 500.

010 **Artists, Broadcasters, Editors, Entertainers, Public Relations Specialists, Writers**

Biological/Life Scientists
021 Agricultural and food scientists
022 Biochemists and biophysicists
023 Biological scientists (e.g., botanists, ecologists, zoologists)
024 Forestry, conservation scientists
025 Medical scientists (excluding practitioners)
026 Technologists and technicians in the biological/life sciences
027 OTHER biological/life scientists

Clerical/Administrative Support
031 Accounting clerks, bookkeepers
032 Secretaries, receptionists, typists
033 OTHER administrative (e.g., record clerks, telephone operators)

040 **Clergy and Other Religious Workers**

Computer Occupations
(Also see 173)
*** Computer engineers (See 087, 088 under Engineering)
051 Computer programmers (business, scientific, process control)
052 Computer system analysts
053 Computer scientists, except system analysts
054 Information systems scientists or analysts
055 OTHER computer, information science occupations

*** **Consultants** *(select the code that comes closest to your usual area of consulting)*

070 **Counselors, Educational and Vocational**
(Also see 236)

Engineers, Architects, Surveyors
081 Architects
*** Engineers (Also see 100-103)
  082 Aeronautical, aerospace, astronautical engineer
  083 Agricultural engineer
  084 Bioengineering and biomedical engineer
  085 Chemical engineer
  086 Civil, including architectural and sanitary engineer

*** Engineers *(continued)*
  087 Computer engineer - hardware
  088 Computer engineer - software
  089 Electrical, electronic engineer
  090 Environmental engineer
  091 Industrial engineer
  092 Marine engineer or naval architect engineer
  093 Materials or metallurgical engineer
  094 Mechanical engineer
  095 Mining or geological engineer
  096 Nuclear engineer
  097 Petroleum engineer
  098 Sales engineer
  099 Other engineers
*** Engineering Technologists and Technicians
  100 Electrical, electronic, industrial, mechanical
  101 Drafting occupations, including computer drafting
  102 Surveying and mapping
  103 OTHER engineering technologists and technicians
104 Surveyors

110 **Farmers, Foresters & Fishermen**

Health Occupations
111 Diagnosing/Treating Practitioners (e.g., dentists, optometrists, physicians, psychiatrists, podiatrists, surgeons, veterinarians)
112 Registered nurses, pharmacists, dieticians, therapists, physician assistants
236 Psychologists, including clinical
113 Health Technologists & Technicians (e.g., dental hygienists, health record technologists/technicians, licensed practical nurses, medical or laboratory technicians, radiologic technologists/technicians)
114 OTHER health occupations

120 **Lawyers, Judges**

130 **Librarians, Archivists, Curators**

Managers, Executives, Administrators
(Also see 151-153)
141 Top and mid-level managers, executives, administrators (people who manage other managers)
*** All other managers, including the self-employed - Select the code that comes closest to the field you manage

JOB CATEGORIES LIST (continued)

Management-Related Occupations
(Also see 141)
151 Accountants, auditors, and other financial specialists
152 Personnel, training, and labor relations specialists
153 OTHER management related occupations

Mathematical Scientists
171 Actuaries
172 Mathematicians
173 Operations research analysts, modeling
174 Statisticians
175 Technologists and technicians in the mathematical sciences
176 OTHER mathematical scientists

Physical Scientists
191 Astronomers
192 Atmospheric and space scientists
193 Chemists, except biochemists
194 Geologists, including earth scientists
195 Oceanographers
196 Physicists
197 Technologists and technicians in the physical sciences
198 OTHER physical scientists

*** Research Associates/Assistants
(Select the code that comes closest to your field)

Sales and Marketing
200 Insurance, securities, real estate, and business services
201 Sales Occupations - Commodities Except Retail
(e.g., industrial machinery/equipment/supplies, medical and dental equipment/supplies)
202 Sales Occupations - Retail
(e.g., furnishings, clothing, motor vehicles, cosmetics)
203 OTHER marketing and sales occupations

Service Occupations, Except Health
(Also see 111-114)
221 Food Preparation and Service (e.g., cooks, waitresses, bartenders)
222 Protective services (e.g., fire fighters, police, guards)
223 OTHER service occupations, except health

Social Scientists
231 Anthropologists
232 Economists
233 Historians, science and technology
234 Historians, except science and technology
235 Political scientists
236 Psychologists, including clinical (Also see 070)
237 Sociologists
238 OTHER social scientists

240 Social Workers

Teachers/Professors
251 Pre-Kindergarten and kindergarten
252 Elementary
253 Secondary - computer, math, or sciences
254 Secondary - social sciences
255 Secondary - other subjects
256 Special education - primary and secondary
257 OTHER precollegiate area
*** Postsecondary
  271 Agriculture
  272 Art, Drama, and Music
  273 Biological Sciences
  274 Business Commerce and Marketing
  275 Chemistry
  276 Computer Science
  277 Earth, Environmental, and Marine Science
  278 Economics
  279 Education
  280 Engineering
  281 English
  282 Foreign Language
  283 History
  284 Home Economics
  285 Law
  286 Mathematical Sciences
  287 Medical Science
  288 Physical Education
  289 Physics
  290 Political Science
  291 Psychology
  292 Social Work
  293 Sociology
  294 Theology
  295 Trade and Industrial
  296 OTHER health specialties
  297 OTHER natural sciences
  298 OTHER social sciences
  299 OTHER Postsecondary

Other Professions
401 Construction trades, miners and well drillers
402 Mechanics and repairers
403 Precision/production occupations
(e.g., metal workers, woodworkers, butchers, bakers, printing occupations, tailors, shoemakers, photographic process)
404 Operators and related occupations
(e.g., machine set-up, machine operators and tenders, fabricators, assemblers)
405 Transportation/material moving occupations

500 Other Occupations (Not Listed)

D25. Is the name and address information below the best one for us to use in future mailings?

1 ☐ Yes

2 ☐ No → *Please make name and address changes as needed below. Please print clearly.*

Title	First Name	Middle Initial	Last Name

Number and Street/Apt. No.	City/Town	State	ZIP CODE Plus 4
			—

Country (If outside U.S.)

THANK YOU FOR COMPLETING THE QUESTIONNAIRE.

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